17° *Die Maij*, 1699.

Imprimatur Liber cui Titulus, *Orang-Outang, sive Homo Sylvestris*, &c. Authore *Edvardo Tyson* M. D. R. S. S.

John Hoskins *V. P. R. S.*

3 My 35

3 My 35

Orang-Outang, sive Homo Sylvestris:

OR, THE Alex Mc Naghton

ANATOMY

OF A

PYGMIE

Compared with that of a

Monkey, an *Ape*, and a *Man.*

To which is added, A

PHILOLOGICAL ESSAY

Concerning the

Pygmies, the *Cynocephali*, the *Satyrs*, and *Sphinges* of the ANCIENTS.

Wherein it will appear that they are all either *APES* or *MONKEYS*, and not *MEN*, as formerly pretended.

By *EDWARD TYSON* M. D.
Fellow of the Colledge of Physicians, and the Royal Society: Physician to the Hospital of *Bethlem*, and Reader of Anatomy at *Chirurgeons-Hall.*

LONDON:
Printed for *Thomas Bennet* at the *Half-Moon* in St. *Paul's* Church-yard; and *Daniel Brown* at the *Black Swan* and *Bible* without *Temple-Bar* and are to be had of Mr. *Hunt* at the Repository in *Gresham-Colledge.* MDC XCIX.

QM21
.T93
1699
Joner Coll.

MMa 3 Ny 35

TO THE

RIGHT HONOURABLE

JOHN Lord Sommers,

Baron of *EVESHAM*,

Lord High Chancellor

OF

ENGLAND,

One of the Lords of his MAJESTIES most Honourable PRIVY COUNCIL,

And Preſident of the ROYAL SOCIETY.

SIR,

THE great Variety of weighty and important Affairs, in which your Lordſhip is engaged; one would think, did ſo entirely engroſs your Time, that you could not have a Minute left to beſtow on the Muſes. Your unwearied and ſucceſful Application to the

the Buſineſs of the State, in the niceſt Conjunctions, that perhaps England *ever ſaw; as well as your inexpreſſible Labours in diſtributing Juſtice, in your High Station; have been attended with Univerſal Applauſe: and have convinced all the World, how much the Honour of his Majeſty's Government, and the Happineſs of his People, depend on the Capacity and Integrity of his Miniſters. You have not ſuffered, even neceſſary Refreſhments to interrupt your Conſtant Cares for the Publick. To ſerve your Country, you have defrauded your ſelf both of Meat, and Reſt; which, my Lord, is the only Act of Injuſtice, that was ever charged upon you. Your immoderate Labours make daily Encroachments upon your Health; or at leaſt 'tis the fear of every good Man, that they ſhould. And yet your Lordſhip, notwithſtanding all Diſſwaſions, perſeveres inflexible; as if, animated by the Noble Spirit of an Old Roman, you were reſolved to Sacrifice your Life, for the Good of your Country.*

And yet, my Lord, amidſt ſuch a multiplicity of the greateſt Affairs, to which you pay a conſtant Attendance; you have not only found Time, to apply your Thoughts to all kinds of Literature, ſo as to become a great Maſter in all; But you have likewiſe extended your Care to the Intereſts of Learning, and to the Encouraging of thoſe, who ſtudy the Advancement of it. Among many other Inſtances, your Lordſhip has lately condeſcended, to Preſide over the Royal Society; *that*

that was inſtituted, for the Improvement of Natural Experimental Philoſophy; and you have taken care, to Expreſs your great Zeal and Readineſs, to contribute every thing in your Power, to Protect their Intereſts, and Promote their Reputation. And under your Lordſhip's enlivening Influence, there is all the Reaſon in the World to expect, that Learning will again flouriſh there, as well as among other Orders of Men.

This, my Lord, has ſo embolden'd me, humbly to preſent this Performance to your Lordſhip. For ſince ſo Great a Patron of Letters is riſen in the midſt of us; we think we have a ſort of Right to his Countenance and Protection. I wiſh the Preſent I preſume to make you, was more worthy of your Lordſhip: All that I can ſay to recommend it, is, that the Subject is Novel, and that Care has been taken to give it a juſt Deſcription; which, I may ſay, without vanity, never yet appeared in Publick.

'Tis a true Remark, which we cannot make without Admiration; That from Minerals, to Plants; from Plants, to Animals; and from Animals, to Men; the Tranſition is ſo gradual, that there appears a very great Similitude, as well between the meaneſt Plant, and ſome Minerals; as between the loweſt Rank of Men, and the higheſt kind of Animals. The Animal of which I have given the Anatomy, coming neareſt to Mankind; ſeems the Nexus of the Animal and Rational, as your Lordſhip, and thoſe of your High Rank and Order for Knowledge

ledge and Wiſdom, approaching neareſt to that kind of Beings which is next above us; Connect the Viſible, and Inviſible World.

If this Performance ſhall Promote the Deſign of the Society, of which I have the Honour to be a Member, and which your Lordſhip is pleaſed to Preſide over; by improving the Natural Hiſtory of Animals, and affording the Reader any Delightful and Uſeful Inſtructions; I ſhall look on my Time and Pains, well rewarded. I am

My Lord,

Your Lordſhip's moſt humble

and moſt obedient Servant

EDWARD TYSON.

THE

PREFACE.

LEAST this Diſcourſe ſhould be rejected meerly for the Title's ſake, as if 'twere intended only to divert the Reader, with the Recital of the Fabulous and Romantick Stories, which have been related on the Subjects I have propoſed to treat of: I think it neceſſary to premiſe, that as my chief Deſign in this Undertaking is the Improvement of the *Natural Hiſtory* of *Animals*; ſo I have made it my Buſineſs more, to find out the *Truth*, than to enlarge in the *Mythology*; to inform the *Judgment*, than to pleaſe the *Phancy*. And the *Orang-Outang* (whoſe *Anatomy* I here give) being a Creature ſo very remarkable, and rare; and not only in its External Shape, but much more in the Conformation of a great many of the inward *Viſcera*, ſo much reſembling a Man; I thought I could not be too particular, in my Deſcription of it; though to ſome, who have not a Taſt of theſe Matters, I may ſeem prolix and tedious.

To render this *Diſquiſition* more uſeful, I have made a *Comparative* Survey of this *Animal*, with a *Monkey*, an *Ape*, and a *Man*. By viewing the ſame Parts of all theſe together, we may the better obſerve *Nature's Gradation* in the Formation of *Animal* Bodies, and the Tranſitions made from one to another; than which, nothing can more conduce to the

Attainment of the true Knowledge, both of the *Fabrick*, and *Uſes* of the Parts. By following *Nature*'s Clew in this wonderful *Labyrinth* of the *Creation*, we may be more eaſily admitted into her *Secret Receſſes*, which Thread if we miſs, we muſt needs err and be bewilder'd.

In drawing up this *Compariſon*, I have made uſe of the *Anatomy* which is given of *Apes* and *Monkeys* by other Authors; and very frequently have quoted their own words, which has render'd my Diſcourſe much longer: For not having theſe *Animals* by me to diſſect and compare, I thought it but juſt to let the *Reader* ſee, upon what Authorities I went. And though a ſhort Reference might be eſteemed ſufficient, without this tedious and unfaſhionable way of inſerting the whole *Text*; yet if any one will give himſelf the trouble of Examining the Evidences I have produced, I think I have dealt more kindly by him, in making him a Judge himſelf; than in leaving him barely to truſt to my Report. For there are none, who have been converſant with Books, but muſt acknowledge, that they have been often impoſed upon, for want of this fair dealing, as I have my ſelf Experienced in this preſent Enquiry. To avoid therefore this Error, my Caution it may be has lead me into another, which I hope the *Reader* will pardon, if he judges it ſuch.

Galen formerly diſſected *Apes* and *Monkeys*, and recommended to his Scholars the frequent *Anatomizing* them, as uſeful for the attaining the Knowledge of the Structure of the Parts in *Humane* Bodies. Had he met with our *Animal*, it had ſerved his turn much better: Nor had he been liable to ſome Miſtakes, which *Veſalius* charges him with, ſince in ſo many Parts, the *Orang-Outang* imitates a *Man*, more than *Apes* and *Monkeys* do. Not only *Galen*, but the greateſt *Anatomiſts* we have had in this laſt Age, have exerciſed their Pens about them; as plainly appears in the enſuing Diſcourſe, which ſufficiently juſtifies me for engaging in this Argument: I wiſh I had ſo good an Apology for my Performance.

This

This great Agreement, which I obſerved between the *Orang-Outang*, and a *Man*, put me upon conſidering, whether it might not afford the Occaſion to the Ancients, of inventing the many Relations, which they have given us of ſeveral *ſorts* of *Men*, which are no where to be met with but in their Writings. For I could not but think, there might be ſome Real Foundation for their *Mythology*; which made me more ſtrictly enquire into their Records; and examining them, I always found ſomething new, that inſenſibly lead me on far beyond what at firſt I intended: and if I do not deceive my ſelf, I have at laſt gained a clearer Light in theſe Matters, than any that has hitherto appeared.

For what created the greateſt difficulty, was their calling them *Men*, but yet with an Epithet for diſtinction ſake; as the Ἄνδρες Ἄγριοι, Μικροί, Πυγμαῖοι, Μέλανες; ſo the Ἄνθρωποι Κυνοπρόσωποι, &c. *i. e.* the *Wild Men*, the *Little Men*, the *Pygmæan Men*, the *Black Men*, the *Men* with *Dogs Faces*, &c. yet at the ſame time I find that they made them Θῆρια, *Wild Beaſts*; and if ſo, no doubt but they were of the *Quadru-manus* kind; *i. e.* either *Apes* or *Monkeys*. And ſuch were likewiſe the *Satyrs*, the *Fauni*, *Pan*, *Ægipan*, *Sylvanus*, *Silenus*, and the *Nymphæ*, as alſo the *Sphinges* of the Ancients.

But ſo many *Romances* have been made about them, that not only *Strabo* formerly, but the moſt noted Men of Learning of late, have looked upon them as meer Fictions of the *Poets*, and have utterly denied them any real Being. *Homer*'s *Geranomachia* therefore, or *Fight* of the *Cranes* and *Pygmies*, I have rendered a probable Story. *Ariſtotle*'s aſſertion of the being of *Pygmies*, I have vindicated from the falſe Gloſſes of others. The Conjectures of other Learned Men about them, I have examined: And by what I have ſaid in the following *Philological Eſſay*, I think I have fully proved, that there were ſuch *Animals* as the Ancients called *Pygmies*, *Cynocephali*, *Satyrs*, and *Sphinges*; and that they were only *Apes* and *Monkeys*.

Had

Had my Leiſure been greater, I had contracted the whole, and taken more care both in the *Method*, and ***Expreſſion.*** But moſt of the vacant Hours from the neceſſary Attendance on the Buſineſs of my Profeſſion, being taken up in Collecting Materials; to gratifie the Importunity of my Friends, who conſtantly urged the Publication, I ſent my Papers Sheet by Sheet to the Preſs, as I had time to tranſcribe them; ſo that I had not a view of them together, till they were printed. If I have diſcovered the Truth, 'twas what I aimed at, which always appears beſt, when leaſt diſguiſed; and it has been my chief Care in this Undertaking to pull off thoſe Vails and Masks, wherewith the Poets and Poetical Hiſtorians have hitherto obſcured it.

Orang-

Orang-Outang ſive Homo Sylveſtris:

OR, THE

ANATOMY

OF A

PYGMIE.

THAT the *Pygmies* of the Antients were a ſort of *Apes*, and not of *Humane Race*, I ſhall endeavour to prove in the following *Eſſay*. And if the *Pygmies* were only *Apes*, then in all probability our *Ape* may be a *Pygmie*; a ſort of *Animal* ſo much reſembling *Man*, that both the Antients and the Moderns have reputed it to be a *Puny Race* of Mankind, call'd to this day, *Homo Sylveſtris*, The *Wild Man*; *Orang-Outang*, or a *Man* of the *Woods*; by the *Africans Quoias Morron*; by others *Baris*, or *Barris*, and by the *Portugeſe*, the *Salvage*. But obſerving that under theſe Names, they deſcribe different *Animals*; for Diſtinction-ſake, and to avoid Equivocation, I ſhall call the Subject, of which I am about to give the *Anatomy*, a *Pygmie*, from its Stature; which I find to be juſt the ſame with the Stature of the *Pygmies* of the Antients. *Tulpius* 'tis true, and *Bontius*, and *Dapper* do call it, *Satyrus*. And tho' I am of Opinion, that the *Satyrs* of the Antients were of the *Ape*, or rather *Monkey*-kind; yet for the Reaſons alledged in the following *Eſſay*, I cannot think our *Animal* a *Satyr*. The *Baris* or *Barris*, which they deſcribe to be much taller than our *Animal*, probably may be what we call a *Drill*. But I muſt confeſs, there is ſo great Confuſion in the Deſcription of this ſort of Creature, which I find is a very large Family (there being numerous *Species* of them) that in Tranſcribing the Authors that have wrote about them, 'tis almoſt impoſſible but to make miſtakes; from the want of their well diſtinguiſhing them. I ſhall endeavour therefore in my Account of this, ſo to

 diſcri-

diſcriminate it, that it may be eaſily known again, where-ever 'tis met with. Not that I think in a ſingle Obſervation I can be ſo exact, but that I may be liable to make Errors my ſelf, how careful ſoever I have been.

I will not urge any thing more here, why I call it a *Pygmie*: 'Tis neceſſary to give it a Name; and if what I offer in the enſuing *Eſſay*, does not ſufficiently Account for the *Denomination*, I leave it to others to give it one more proper. What I ſhall moſt of all aim at in the following Diſcourſe, will be to give as particular an Account as I can, of the formation and ſtructure of all the Parts of this wonderful *Animal*; and to make a *Comparative* Survey of them, with the ſame Parts in a *Humane Body*, as likewiſe in the *Ape* and *Monkey*-kind. For tho' I own it to be of the *Ape* kind, yet, as we ſhall obſerve, in the *Organization* of abundance of its Parts, it more approaches to the Structure of the ſame in *Men*: But where it differs from a *Man*, there it reſembles plainly the Common *Ape*, more than any other *Animal*.

And tho' I may ſeem too tedious in diſcourſing ſo long upon a ſingle ſubject, yet I have this to offer, that if we had an accurate and particular *Hiſtory* of any *one Species* of *Animal*, it might in a great meaſure ſerve for the *whole kind*. Wherein they differ, might eaſily be taken notice of, and there would be no need of repeating any thing, wherein they all agreed. So formerly diſſecting a Young *Lion* and a *Cat* at the ſame time, I wondred to find ſo very great Reſemblance of all the Parts, both in the one and the other; that the *Anatomy* of the one might ſerve for the other, allowing for the Magnitude of the Parts, with very little other alteration: And not only for this, but for ſeveral other *Animals*, that belong to the ſame Family. I could have wiſhed I had had the like Opportunity, when I was diſſecting our *Pygmie*, of comparing the ſame Parts with thoſe of an *Ape* and a *Monkey*: For want of it, I have referred all along to the Accounts given us of the *Anatomy* of theſe Creatures by other Authors; which, tho' it renders my Diſcourſe more prolix, yet I thought it would not be unacceptable to the Curious. But I ſhall take care to draw up in a ſhorter view, wherein our *Pygmie* more reſembled a *Man*, than an *Ape* and *Monkey*, and wherein it differ'd.

Now notwithſtanding our *Pygmie* does ſo much reſemble a *Man* in many of its Parts, more than any of the *Ape-kind*, or any other *Animal* in the World that I know of: Yet by no means do I look upon it as the Product of a *mixt* Generation; 'tis a *Brute-Animal ſui generis*, and a particular *Species* of *Ape*. For when I was diſſecting it, ſome Sea-Captains and Merchants who came to my Houſe to ſee it, aſſured me, that they had ſeen a great many of them in *Borneo*, *Sumatra*, and other Parts, tho' this was brought from *Angola* in *Africa*; but was firſt taken a great deal higher up in the Country, and in Company with it there was a *Female* of the ſame kind.

I ſhall have hereafter occaſion to make my Remarks on ſeveral Particulars, relating to it's way of Living, it's Sagacity, Actions, and the like.

like. I ſhall now therefore firſt of all deſcribe its *outward* ſhape and figure; then look within, and obſerve the *Mechaniſm* there. But meeting with a *Text* in *Ariſtotle*, wherein he gives a general Deſcription of the *Ape-kind*, I think it not amiſs to Tranſcribe it; and by Commenting upon it, to ſhew wherein our preſent Subject agrees with or differs from it; and what I have beſides to Remark, I ſhall afterwards take notice of, and then proceed to the *Anatomy* of the *Inward* Parts.

Ariſtotle's (1) Text is this, which I ſhall give with *Jul. Cæſ. Scaliger*'s *Latin* Tranſlation: And as you may obſerve by the Letters of Reference, I have rendred each *Paragraph* into *Engliſh*, adding my Obſervations thereon.

(a) Ἔνια δὴ τῶν ζώων ἐπαμφοτερίζει τὴν φύσιν, τῷ τε ἀνθρώπῳ καὶ τοῖς τετράποσιν, οἷον πίθηκοι καὶ κῆβοι, καὶ κυνοκέφαλοι. (b) Ἔστι δ' ὁ μὲν κῆβος, πίθηκος ἔχων οὐράν. (c) Καὶ οἱ κυνοκέφαλοι δὴ τὴν αὐτὴν ἔχουσι μορφὴν τοῖς πιθήκοις, πλὴν μείζονές τ' εἰσὶ, καὶ ἰσχυρότεροι, καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα. Ἔτι δὴ ἀγριώτερά τε τὰ ἤθη, καὶ τοὺς ὀδόντας ἔχουσι κυνοειδεστέρους καὶ ἰσχυροτέρους. (d) Οἱ δὲ πίθηκοι, δασεῖς μέν εἰσι τὰ πρανῆ, ὡς ὄντες τετράποδες· καὶ τὰ ὕπτια δὴ ὡσαύτως, ὡς ὄντες ἀνθρωποειδεῖς. Τοῦτο γὰρ ὅτι τῷ ἀνθρώπων ἐναντίως ἔχει καὶ ὅτι τῷ τετραπόδων, καθάπερ ἐλέχθη πρότερον. Πλὴν ἥ τε θρὶξ παχεῖα, καὶ δασεῖς ἐπ' ἀμφότερα σφόδρα εἰσὶν οἱ πίθηκοι. (e) Τὸ δὴ πρόσωπον, ἔχει πολλὰς ὁμοιότητας τῷ τοῦ ἀνθρώπου. Καὶ γὰρ μυκτῆρας, καὶ ὦτα παραπλήσια ἔχει· Καὶ ὀδόντας, ὥσπερ ὁ ἄνθρωπος, καὶ τοὺς προθίους καὶ τοὺς γομφίους. (f) Ἔτι δὴ βλεφαρίδας, τῷ ἄλλων τετραπόδων οὐκ ἐπ' ἀμφότερα ἐχόντων, οὗτοι ἔχει μὲν, λεπτὰς δὴ σφόδρα, καὶ μᾶλλον τὰς κάτω, καὶ μικρὰς πάμπαν· τὰ γὰρ ἄλλα τετράποδα παύπας οὐκ ἔχει. (g) Ἔχει δὴ ἐν τῷ στήθει δύο θηλὰς μαστῶν μικρῶν. (h) Ἔχει δὲ καὶ βραχίονας, ὥσπερ ἄνθρωπος πλὴν δασεῖς καὶ κάμπτει καὶ τίτους καὶ τὰ σκέλη ὥσπερ ἄνθρωπος, τὰς περιφερείας πρὸς

(a) *Inter hominem, quadrupedúmque genus natura quædam media, atque utrique communis eſt. Quales, ſimia, cebus, caniceps.* (b) *Eſt autem cebus ſimia caudata.* (c) *Caniceps communem cum ſimia formam habet: niſi quod & major & robuſtior eſt: faciémque habet caninæ propiorem. Tum moribus exiſtunt efferatioribus. Dentes quoque caniniores, atque firmiores.* (d) *Simiæ partes quæ cælum ſpectant, ut piloſæ ſunt: Propterea quòd quadrupedum generi aſcribuntur: Ita quæ ad terram devergunt quoque: quia hominis ſpeciem referunt. Nam in homine, & quadrupedibus hoc contrario ſe habere modo ſupra dictum eſt. Cæterùm ſimiis craſſus pilus, ac prædenſus utraque in parte eſt.* (e) *Ejus verò facies multis modis humanæ ſimilis. Quippe tum nares, tum auriculæ: Item dentes tam primores, quàm maxillares ſunt propemodum tales, quales & homini.* (f) *Quinetiam quadrupedes cæteræ cùm in utraque gena neutiquam palpebras habeant: ipſa habet, ſed tennes admodum: tenniores verò inferiores, atque perpuſillos: quibus carent quadrupedes aliæ.* (g) *Ei ſunt in pectore papillæ duæ parvarum mammarum.* (h) *Ad hæc,*

(1) *Ariſtot. Hiſt. de Animal. lib. 2. cap. 13. Ex Edit. Scaliger. cum ſua Com. p. 197, &c.*

ἀγλὴλας;

ἀλλήλας ἀμφοτέρων τῶν κώλων. (i) Πρὸς δὲ τούτοις, χεῖρας καὶ δακτύλους καὶ ὄνυχας ὁμοίους τοῦ ἀνθρώπου· πλὴν πάντα ταῦτα ὅτι τὸ θηριωδέστερον. (k) Ἰδίους δὲ τοὺς πόδας· εἰσὶ γὰρ οἷον χεῖρες μεγάλαι. Καὶ οἱ δάκτυλοι, ὥσπερ οἱ τῶν χειρῶν· ὁ μέσος, μακρότατος· καὶ τὸ κάτω τοῦ ποδὸς, χειρὶ ὅμοιον· πλὴν ὅτι τὸ μῆκος τῆς χειρὸς ὅτι τὰ ἕξακτα τείνον, καθάπερ θέναρ. (l) Τοῦτο δὲ ἐπ' ἄκρῳ σκληρότερον, κακῶς, καὶ ἀμυδρῶς μιμούμενον πτέρνην. Κέχρηται δὲ τοῖς ποσὶν ἐπ' ἄμφω, καὶ ὡς χερσὶ, καὶ ὡς ποσὶ, καὶ συγκάμπτει ὥσπερ χεῖρας. (m) Ἔχει δὲ τὸν ἀγκῶνα καὶ τὸν μηρὸν βραχεῖς, ὥσπερ πρὸς τὸν βραχίονα καὶ τὴν κνήμην. (n) Ὀμφαλὸν δ' ἐξέχοντα μὲν οὐκ ἔχει, σκληρὸν δὲ καὶ καλὰ τὸν τόπον τοῦτον τοῦ ὀμφαλοῦ. (o) Τὰ δ' ἄνω τῶν κάτω πολὺ μείζονα ἔχει, ὥσπερ τὰ τετράποδα. Σχεδὸν γὰρ, ὥσπερ πέντε πρὸς τρία ἔχει, καὶ διὰ τε ταῦτα, καὶ διὰ τὸ τὰς πόδας ἔχειν ὁμοίας χερσὶ, καὶ ὥσπερανεὶ συγκειμένους ἐκ χειρὸς καὶ ποδὸς· ἐκ μὲν ποδὸς, καλὰ τὸ τ' πτέρνης ἕξακτον· ἐκ δὲ χειρὸς, τἄλλα μέρη. Καὶ γὰρ οἱ δάκτυλοι ἔχουσι τὸ καλούμενον θέναρ. (p) Διατελεῖ δὲ τ' πλείω χρόνον τετράπουν ὂν μᾶλλον ἢ ὀρθόν. (q) Καὶ ὅτε ἰσχία ἔχει ὡς τετράπουν ὄν, ὅτε κέρκον ὡς δίπουν, πλὴν μικρὰν τὸ ὅλον, ὅσον σημείου χάριν. (r) Ἔχει δὲ καὶ τὸ αἰδοῖον ἡ θήλεια ὅμοιον γυναικός· ὁ δ' ἄρρην, κυνωδέστερον ἢ ἀνθρώπου. (s) Οἱ δὲ κῆβοι, καθάπερ εἴρηται πρότερον, ἔχουσι κέρκον· τὰ δ' ἐντὸς διαιρεθέντα, ὅμοια ἔχουσιν ἀνθρώπῳ πάντα τὰ τοιαῦτα.

hominis brachia, niſi hirta eſſent. Quæ etiam ſicut & crura hominis modo inflectat. Nam & horum, & illorum curvaturas inter ſe habet contrarias. (i) *Tum manus, digitos, ungues, quaſi humanos. Verùm hæc omnia ferinam ad naturam potiùs vergunt.* (k) *Suus quidam modus pedibus, ac peculiaris. Etenim quaſi manus quædam magnæ ſunt. Quippe & digiti in iis, veluti manuum, medio longiſſimo. Et planta manui ſimilis, quanquam porrectior ad extremum uſque, ſicuti vola.* (l) *Cujus poſtremum calloſius eſt: inepta, atque inexplanata calcanei ſimilitudine. Pedum uſus, & pro manibus, & pro pedibus: flectit enim eos manuum modo.* (m) *Superior brachij pars, & coxa, breves: ſi ad ulnæ, & tibiæ magnitudinem referantur.* (n) *Umbilicus non prominet: ſed durum quiddam ibi invenias.* (o) *Superæ partes inferis majores: quaſi ſi quinarium cum ternario conferas. Hoc autem tum ex quadrupedum natura: tum propterea quòd pedes & manibus ſimiles habet, & quaſi ex pedum, manuúmque conſtitutione compoſitos. Nam calcanei poſtrema pedem, cæteræ partes manum repræſentant. Habent enim digiti id, quod volam appellamus.* (p) *Quadrupedis habitu frequentiore eſt.* (q) *Proque eo nates non habet: neque caudam, quoniam bipes. Sed perpuſillam omnino illam, & notæ tantúm gratia.* (r) *Fœminæ genitale muliebri ſpecie eſt: maribus canina potius, quàm humana.* (s) *Cebi, ſicuti diximus, caudati ſunt. Univerſo generi viſcera ſimilia humanis.*

(a) Ariſt.

(a) Ariſt. *Some Animals are of an intermediate Nature, between a Man and Quadrupeds, as* Apes, *the* Cebi, *and* Cynocephali.

Ἐπαμφοτερίζει τῇ φύσει. *Theodorus Gaza* thus renders this Paſſage: *Sunt quæ natura ancipite, partim hominem, partim Quadrupedem imitentur, ſicut ſimiæ*, &c. Not that an Ape is part a Man, and part a Quadruped; *inter Hominem & non Hominem non datur medium*; The Terms being contradictory, one muſt be falſe. The Philoſopher's meaning muſt therefore be, that in the formation of the Parts of the Body, the *Ape*, the *Cebus*, and *Cynocephalus*, are intermediate Species between a *Man* and other *Quadrupeds*, having ſeveral Parts of the Body formed like *Brutes*; others more reſembling thoſe of *Men*. (2) *Scaliger*, a little after, hath this Remark; "Ad eum namque modum ſummus Opifex Rerum ſeriem "concatenavit a Planta ad Hominem; ut quaſi ſine ullo cohæreant in-"tervallo, ſic ζωόφυτα cum Plantis Bruta conjungunt; ſic cum homine "ſimia Quadrupedes. Itaque in hominis quoque ſpecie inveniamus "Divinos, Humanos, feros. This *Climax* or *Gradation* can't but be taken notice of, by any that are curious in obſerving the Wonders of the *Creation*; and the more he obſerves it, the more venerable *Idea's* 'twill give him of the great *Creator*; and it would be the Perfection of *Natural Hiſtory*, could it be attained, to enumerate and remark all the different *Species*, and their *Gradual Perfections* from one to another. Thus in the *Ape* and *Monkey*-kind, *Ariſtotle's Cebus* I look upon to be a degree above his *Cynocephalus*; and his *Pithecus* or *Ape* above his *Cebus*, and our *Pygmie* a higher degree above any of them, we yet know, and more reſembling a *Man*: But at the ſame time I take him to be wholly a *Brute*, tho' in the formation of the Body, and in the *Senſitive* or *Brutal* Soul, it may be, more reſembling a Man, than any other *Animal*; ſo that in this *Chain* of the *Creation*, as an intermediate Link between an *Ape* and a *Man*, I would place our *Pygmie*.

Πίθηκος, *&c.* The Philoſopher here does not enumerate all the ſeveral *Species* that are contained under the *Ape* and *Monkey*-kind; they are a very numerous and a large *Claſſis* of Animals. *Scaliger* upon the Place mentions ſeveral he had obſerved of both kinds; and all our *Zoographers*, and moſt Journals of Travels give a Deſcription of a great many ſorts of them. But for want of well diſtinguiſhing them, and ranging them into a Methodical *Series*, their *Hiſtory* as yet is very confuſed and perplext. Mr. *Ray* (3) places theſe Animals under this general *Title*, *Animalia Pede unguiculato multifido*, πλατυώνυχα & ἀνθρωπόμορφα. 'Tis call'd *Pithecus*, παρὰ τὸ πείθεσθαι ὑφ' ἡμῶν, *quia facilè ab homine perſuadeatur*; and oftentimes this word is taken as a *Genus* which includes the whole; when ſtrictly taken, it ſignifies an *Ape* without a Tail, and in *Latin* is call'd *Simia*; that which hath a Tail is call'd *Cercopithecus*, in *Engliſh* a *Monkey*. Thus (4) *Martial.*

(2) Scaliger *ibid. in Com*, pag. 201. (3) Raij *Synopſis Animal.* pag. 148. (4) Martial. *Epigram. lib.* 14. *Epigr.* 202.

Callidus

Callidus emiſſas eludere Simius Haſtas,
Si mihi Cauda foret, Cercopithecus eram.

(*b*) Ariſt. *The Cebus is an Ape having a Tail.*

(5) *Conradus Geſner* thinks, that this *Cebus* of *Ariſtotle*, which he deſcribes only as having a Tail, muſt be the *Cercopithecus* or Common *Monkey*, ſince he mentions not the *Cebus* any where elſe, and the *Cercopithecus* no where. (6) *Harduinus*, in his Notes on *Pliny*, adviſes not to miſtake the *Cepus* in *Pliny*, for the *Cebus* in *Ariſtotle*. (6) *Pliny*'s words are theſe; *Pompeij Magni primum Ludi oſtenderunt Chama, quem Galli Ruſium vocabant, Effigie Lupi, Pardorum maculis. Iidem ex Æthiopia quas vocant κήπους, quarum Pedes poſteriores, Pedibus humanis & cruribus, priores manibus fuere ſimiles, hoc Animal poſtea Roma non vidit.* And therefore becauſe it was ſo uncommon as to be ſeen at *Rome* but once, it could not be the common *Monkey*. (7) *Strabo*, out of *Artemidorus*, deſcribes the *Cepus* thus: γίγνονται δὲ φησι καὶ σφίγγες, καὶ κυνοκέφαλοι, καὶ κῆποι, λέοντος μὲν πρόσωπον ἔχοντες, τὸ δὲ λοιπὸν σῶμα πάνθηρος, μέγεθος δὲ δορκάδος. That the *Cepus* hath the Face of a *Lion*, the reſt of the Body like a *Panther*, and is of the bigneſs of a *Dorcas* or *Roe-Buck*. (8) *Diodorus Siculus* hath much the ſame Deſcription, ὁ δὲ λεγόμενος κῆπος, ὠνόμασται μὲν ἀπὸ τῆς περὶ ὅλον τὸν ὄγκον ὡραίας, καὶ προσηνοῦς ἡλικίας. Τὸ δὲ πρόσωπον ἔχων ὅμοιον λέοντι, τὸ λοιπὸν σῶμα φέρει πάνθηρι παραπλήσιον, πλὴν τῷ μεγέθει, ὃ παρίσωται δορκάδι. Which *Laurentius Rodomanus* thus renders. " Cepus, *i. e.* Hortus (quem vocant) à totius " Corporis decore & ſtaturæ venuſtate nomen accepit, facie Leonem imi- " tatur, & reliquo Pantheram, præter magnitudinem, qua Dorcadi par " eſt. (9) *Ælian* hath given a Deſcription of the ſame Animal from *Pythagoras*, from whom, 'tis thought, it firſt received this Name; and he is more particular. His Account, tho' ſomewhat long, I will give in *P. Gillius*'s Tranſlation, becauſe I am apt to think this *Animal* is ſtill in being. " Terrenum quoddam Animal Pythagoras ſcribit ſecundùm " Mare Rubrum procreari & Cepum, hoc eſt Hortum appoſitè idcircò " nominari, quòd tanquam Hortus variis coloribus diſtinguatur. Cùm " exiſtit confirmata ætate, pari magnitudine eſt cum Herythrienſibus " Canibus. Jam porro ejus Colorum varietatem, ſicut ille ſcribit, ani- " mus nobis eſt explicare. Ejus caput & poſticas partes ad caudam uſque " prorſus valde igneo colore ſunt, tum aurei quidam Pili diſſeminati " ſpectantur, tum album roſtrum, inde ad Collum aureæ vittæ pertinent, " Colli inferiores partes ad Pectus, & anteriores Pedes omnino albi, " Mammæ duæ manum implentes cæruleo colore viſuntur, venter candi- " dus, Pedes poſteriores nigri ſunt, Roſtri formæ Cynocephalo recte

(5) *Hiſt. de Quadruped.* l. 1. p. 857. (6) Plinij *Hiſt. Nat.* lib. 8. cap. 19. *cum Interpret. & Notis* Jo. Harduini, p. 167. (7) *Geograph.* lib. 16. p. 533. (8) Diodor. Sicul. *Biblioth. Hiſt.* l. 3. p. m. 168. (9) Ælian. *de Animal.* lib. 17. cap. 8. p. 474.

" com-

" comparari poteſt. The *Cepus* therefore of *Pliny*, *Strabo*, *Diodorus Siculus*, and *Ælian*, in all probability muſt be different from the *Cebus* of *Ariſtotle*. *Joh. Caius* our Country-man ſent *Geſner* a Deſcription of a *Mamomet* or *Marmoſet* he had obſerved, which *Geſner* thinks might be a ſort of *Cepus*; but the Colours were different, as likewiſe the Magnitude.

(*c*) Ariſt. *The* Cynocephali *have the ſame ſhape with* Monkeys, *but they are bigger, and ſtronger, and they have a Face liker a Dog's, and are of a fiercer Nature, and they have Teeth liker a Dog's, and ſtronger.*

I ſhall have occaſion to Diſcourſe of theſe *Cynocephali* in the enſuing *Eſſay*. For tho' the Philoſopher makes them only a ſort of *Ape* or *Monkey*, yet there have been thoſe, that would impoſe them on the World for a Race of *Men*; and by (10) *Ælian* they are call'd ἄνθρωποι κυνοπρόσωποι; tho' (11) *Galen* tells us, they are much leſs like a *Man*, than an *Ape* is: For they can ſcarce ſtand upright, much leſs walk or run ſo. (12) *Philoſtorgius* mentions the *Aegopithecus*, the *Arctopithecus*, the *Leontopithecus*, as well as the *Cynocephalus*, and then adds, καὶ ἄλλαις πολλῶν ζωῶν εἰδέαις τῆς πιθηκείας μορφῆς ἐπιμιγνυμένης. That there is the *Goat-Ape*, the *Bear-Ape*, the *Lion-Ape*, the *Dog-Ape*; and that the *Ape-kind* have a reſemblance to a great many other *Animals*; ſo large and numerous is this *Claſſis* of Animals, that perhaps there is none that is more; and that are ſo different from one another. The *fierceneſs* of the *Cynocephali* is taken notice of by all; our *Pygmie* was quite of another temper, the moſt gentle and loving Creature that could be. Thoſe that he knew a Ship-board he would come and embrace with the greateſt tenderneſs, opening their Boſoms, and claſping his Hands about them; and as I was informed, tho' there were *Monkeys* aboard, yet 'twas obſerved he would never aſſociate with them, and as if nothing a-kin to them, would always avoid their Company. The *Teeth* of the *Cynocephali* are like a *Dog's*; thoſe of our *Pygmie* exactly reſembled a *Man's*, as I ſhall ſhew in the *Oſteology*.

(*d*) Ariſt. *Apes are hairy on their Backs, as they are Quadrupeds, and on their Bellies, as they are like Men: For in a Man and a Beaſt this hairineſs is quite contrary, as was ſaid before. So that Apes are very hairy in both Places, their Hair being ſtrong or courſe, and thick ſet.*

The Place that *Ariſtotle* refers to, is this. (13) Ἔστι δὲ τῶν μὲν ἄλλων ζώων τῶν ἐχόντων τρίχας, τὰ πρανῆ δασύτερα, τὰ δ' ὕπτια, ἢ λεῖα πάμπαν, ἢ δασέα ἧττον. ὁ δ' ἄνθρωπος τουναντίον. i. e. *That in Brutes the Back or upper Parts are more hairy, the Belly or under Parts either ſmooth or leſs hairy: In a Man is obſerved the contrary.* But in our *Pygmie* we obſerved it different; for here all behind from the Head downwards, 'twas very hairy, and the Hair ſo thick, that it covered the Skin almoſt from being ſeen.

(10) Ælian. *Hiſt. de Anim.* lib. 10. cap. 26. *in Edit.* P. Gillij. *in aliis cap.* 25. (11) Galen. *de Adminiſtr. Anat.* l. 1. cap. 2. (12) Philoſtorgij *Hiſt. Eccleſiaſt.* lib. 3. cap. 11. p. 41. (13) Ariſt. *Hiſt. de Animal.* lib. 2. c. 5. p. 160. *Edit.* Scalig.

But

But in all the Parts before, the Hair was much thinner, and the Skin every where appeared, and in ſome places 'twas almoſt bare. Nature therefore has cloathed it with Hair, as a Brute, to defend it from the Injuries of the Weather; and when it goes on all four, as a *Quadruped*, it ſeems all hairy: When it goes erect, as a *Biped*, it appears before leſs hairy, and more like a *Man*. After our *Pygmie* was taken, and a little uſed to wear Cloaths, it was fond enough of them; and what it could not put on himſelf, it would bring in his Hands to ſome of the Company to help him to put on. It would lie in a Bed, place his Head on the Pillow, and pull the Cloaths over him, as a Man would do; but was ſo careleſs, and ſo very a Brute, as to do all Nature's Occaſions there. It was very full of Lice when it came under my Hands, which it may be it got on Ship-board, for they were exactly like thoſe on Humane Bodies. (14) *Seignior Redi* obſerves in moſt Animals a particular ſort of Louſe, and gives the Figures of a great many.

The Hair of our *Pygmie* or *Wild Man* was of a Coal-black colour, and ſtrait; and much more reſembling the Hair of *Men* than the Furr of Brutes: For in the Furr of Brutes, beſides the longer Hair, there is uſually a finer and ſhorter *Pile* intermixt: Here 'twas all of a kind; only about the *Pubis* the hair was greyiſh, ſeemed longer, and ſomewhat different; ſo on the upper Lip and Chin, there were greyiſh hairs like a *Beard*: And I was told by the Owners, that once it held the Baſon it's ſelf, to be trimmed. The Face, Hands, and Soles of the Feet were bare and without Hair, and ſo was moſt part of the Forehead: But down the ſides of the Face 'twas very hairy; the hairs there being about an Inch and half long, and longer than in moſt Parts of the Body beſides. The tendency of the Hair of all the Body was downwards; but only from the Wriſts to the Elbow 'twas upwards; ſo that at the Elbow the Hair of the Shoulder and the Arm ran contrary to one another. Now in *Quadrupeds* the Hair in the fore-limbs have uſually the ſame Inclination downwards, and it being here different, it ſuggeſted an Argument to me, as if Nature did deſign it as a *Biped*. But we will lay no more ſtreſs upon it than it will bear: The Hair on the back-ſide of the Hands did run tranſverſe, inclining to the outſide of the Hands; and thoſe of the hinder ſides of the Thighs were tranſverſe likewiſe.

Man, tho' not ſo hairy as *Brutes*, and (as *Ariſtotle* obſerves) more hairy before, than behind; yet if expoſed to the hardſhips of the Weather, like them; no doubt, but he would become hairy on the Body likewiſe; which might poſſibly be the Caſe of *Nebuchadnezzar*. (15) And very Remarkable is that Story of *Peter Serrano* a *Spaniard*, who was caſtaway, and eſcaped to a Deſart Iſland, which from him afterwards received it's Name, as 'tis related by the *Inca Garcilaſſo de la Vega*. (16) For having with the greateſt difficulty ſuſtained a miſerable Life for three

(14) Franc. Redi *Experimenta circa generat. Inſector.* (15) Daniel, *Cap.* 4. 33. (16) Royal Commentaries of *Peru*. lib. 1. cap. 3.

Years,

Years, " The Hairs of his Body grew in that manner, that he was co-
" vered all over with Briſtles; the hair of his Head and Beard reach-
" ing to his Waſte, that he appeared like ſome Wild or Savage Crea-
" ture.

(e) Ariſt. *Their Face hath many Reſemblances to a Man's, for they have Noſtrils and Ears alike; and Teeth like a Man's, both the Fore-teeth and the Grinders.*

Pliny (17) ſeems to have reſpect to this *Text* of *Ariſtotle*, and what follows, where he tells us, " Nam ſimiarum genera perfectam Hominis
" imitationem continent, facie, Naribus, Auribus, Palpebris, quas ſolæ
" Quadrupedum in inferiore habent Genâ. Jam Mammas in Pectore,
" Brachia & Crura in contrarium ſimilitèr flexa. In manibus, ungues,
" digitos, longioremque medium. Pedibus paulùm differunt, ſunt
" enim, ut manus, prælongi, ſed veſtigium Palmæ ſimile faciunt. Pol-
" lex quoque his & Articuli, ut homini; ac præter Genitale, & hoc in
" maribus tantùm. Viſcera etiam interiora omnia ad exemplar. We will compare both their Accounts, with our *Pygmie*; and obſerve wherein they agree or differ from us.

As for the *Face* of our *Pygmie*, it was liker a *Man's*, than *Ape's* and *Monkeys* Faces are: For it's *Forehead* was larger, and more globous, and the upper and lower *Jaw* not ſo long or prominent, and more ſpread; and it's *Head* more than as big again as either of theirs: But why the *Philoſopher*, after his general Aſſertion of the likeneſs of the *Face* of an *Ape* to that of a *Man's*, ſhould firſt of all inſtance in the *Noſe*, which is ſo much different, may ſeem ſtrange: Since in a *Man* the *Noſe* is protuberant and riſing, jutting out much beyond the whole ſurface, and herein 'tis altogether unlike to that of Brutes, and the *Ape*-kind too. 'Tis not therefore on this account that the Compariſon is made. But I rather think, his meaning muſt be, that an *Ape's Noſe* is like a *Man's*, in that it is not extended to the length of the *Roſtrum*, or upper *Jaw*, as in Dogs and other Brutes, but reaches only to the upper *Lip*. *à ſimis Naribus*, or this flatneſs of the *Noſe*, moſt do derive the word *Simia*; tho' others, as *Voſſius*, would have it, *quaſi mimia* à μιμεῖσθαι, *imitari*, from mimicking. But *Scaliger* will not allow it. *Dicitur autem Simia* (ſaith he) *non ab Imitatione, ut Grammatici imperiti, ſed à ſimitate.*

The *Noſe* of our *Pygmie* was flat like an *Ape's*, not protuberant as a *Man's*; and on the outſide of each *Noſtril* there was a little ſlit turning upwards, as in *Apes*. 'Tis obſerved of the *Indian Blacks*, that their *Noſe* is much flatter than the *Europeans*; which may be thought rather Natural to that Nation, than occaſioned (as ſome would make us believe) by the Mother's tying the Infant to her Back, and ſo when at Work bruiſing and flatting it againſt her Shoulders; becauſe 'tis ſo univerſal in them all.

(17) *Natur. Hiſt.* lib. 11. cap. 44. p. m. 593.

As to the *Ears*, none could more reſemble thoſe of a *Man*, than our *Pygmie*'s; both as to the largeneſs, colour, ſhape, and ſtructure. Here I obſerved the *Helix*, *Ant-Helix*, *Concha*, *Alvearium*, *Tragus*, *Anti-tragus*, and *Lobus*; only the *Cartilage* was very fine and thin, and the *Ears* did not lye ſo flat to the *Head*, as they do in a *Man*. But that may be from the Cuſtom of binding our Heads, when Infants.

The *Teeth* of our *Pygmie* reſembled a *Man's*, more than do thoſe of *Apes* and *Monkeys*; as I ſhall ſhew in the *Oſteology*.

(*f*) Ariſt. *And whereas other Quadrupeds have not Hair on both Eye-lids, theſe have; But 'tis very fine, eſpecially that on the lower Eye-lid, and very ſmall. But other Quadrupeds have none there.*

In our *Pygmie* the *Cilia* or Hair of both Eye-lids appeared very fair and plain, but not ſo large as in *Men*. The *Supercilia* or Hair of the *Eye-brows*, ſeem'd to be rubb'd off; which might be occaſioned by the jutting out of the *Cranium* in that place, more than in *Men*: Which is a Provident Proviſion of *Nature*, for the better ſafeguard of the *Eyes*, and their defence from the Injuries they might otherwiſe receive in the Woods. But the *Philoſopher's* Aſſertion, that no *Quadruped* hath *Hair* on the *under Eye-lid* beſides *Man* but the *Ape*-kind, I cannot juſtifie; or I do not take his meaning aright: Tho' he has much the ſame Opinion a little before. (18) Where he tells us, Καὶ βλεφαρίδας ὁ μὲν ἄνθρωπος ἀπ' ἄμφω ἔχει, καὶ ἐν μασχάλαις ἔχει τρίχας, καὶ ὅπῃ τῆς ἥβης. Τῶν δ' ἄλλων οὐθὲν ὅτε τούτων ἰδίτερον, ὅτε τὴν κάτωθεν βλεφαρίδα, ἀλλὰ κάτωθεν τῦ βλεφάρυ ἐνίοις μανὰ τρίχες περύκασιν. Which *Scaliger* thus renders: *Ac Palpebras homo utrâque in Genâ habet tum & in Alis, & in Pube Pilos. Cæteræ Animantes neque in his locis, neque in Genâ inferiore: Sed ſub Genam & paucos & paucæ.* Our *Pygmie* had Hair in the *Arm-pits*, and that in the *Pubis* ſeemed ſomewhat different from what grew on the reſt of the Body; being not ſo ſtrait, but ſomewhat curled; and greyiſh, not black. But I muſt here Remark, that *Pliny* uſes the words *Palpebræ* and *Gena*, in his Tranſlating this Text of *Ariſtotle*, different from what commonly they ſignifie now. For by *Palpebræ* he means, what *Ariſtotle* and *Hippocrates* call βλεφαρίδας, *i. e.* the *Hair* on the Rim of the *Eye-lids*, *à palpitatione*; and *Feſtus* calls *Cilia*, *quia oculos celent & tueantur*: And by *Gena*, he underſtands the *Eye-lid*; as appears from that Paſſage of *Pliny* I have juſt now quoted, , *Palpebris quas ſolæ Quadrupedum in inferiore habent Genâ.* And ſo *Scaliger* uſes theſe words in this Tranſlation of *Ariſtotle*: And he makes *Cilium* to ſignifie, *Summum Genæ ambitum*, and not the Hair there.

(*g*) Ariſt. *They have two Teats or Nipples of ſmall Breaſts on the* Sternum.

(18) *Hiſt. Animal.* lib. 2. p. m. 161.

The

The *Philoſopher* here obſerves, That the *Ape-kind*, common with *Humane*, have the *Mammæ* on the *Sternum* or Breaſt, which is different from *Brutes*. And tho' the *Elephant* herein ſeems ſomewhat alike, yet he makes this diſtinction, (19) ὁ δὲ ἐλέφας ἔχει μὲν μαστὸς δύο, ἀλλ' οὐκ ἐν τῷ στήθει, ἀλλὰ πρὸς τῷ στήθει. *Juxta Pectus potius, quàm in Pectore*, as *Scaliger* renders it; or as *Theodorus Gaza*, *non in Pectore, ſed paulò citra*. And a little after, (20) he more particularly expreſſes himſelf, ἡ γὲ ὁ ἐλέφας ἔχει τοῦς μαστὸς δύο περὶ τὰς μασχάλας. *Sub Armis*, as *Gaza* renders it; *ad Axillas*, as *Scaliger*, where he further tells us, That the *Male* as well as *Female Elephant* have theſe *Teats*; but they are very ſmall, in reſpect of the Bulk of it's Body, and ſo placed that ſide-ways, you can't ſee them. The *Bear* (he adds) hath four *Teats*; *Sheep* have but two, and thoſe between the hinder Legs; *Cows* have four *Teats* there. Other *Animals* (he ſaith) have theſe *Teats* in the middle of the *Belly*, and uſually more numerous; as the *Dog* and *Swine-kind*: But the *Panther* hath but four in the Belly: The *Camel* hath two *Mammæ* there, and four *Teats*, as a *Cow*; and a *Lioneſs* but two there.

But *Apes* and *Monkeys* have their *Teats* upon the *Breaſt*, as *Women* have; and (21) *Albertus Magnus* gives this Reaſon for it, *Mammillas autem habet in Pectore ſicut Mulier, eò quòd manus dedit ei Natura, quibus ad Pectus poteſt elevare partum, ſicut Mulier.* Our *Pygmie* was a *Male*, yet here the two *Papillæ* or *Teats* appeared very plain, and were exactly ſituated as they are in Men. The *Mammæ* or *Breaſts* were ſmall and thin, and not protuberant. The *Female Orang-Outang* of (22) *Bontius* is pictured with pendulous large *Breaſts*, and they are ſo deſcribed by (23) *Tulpius*. And (24) *Gaſſendus*, in the Life of *Peireſky*, ſpeaking of the *Barris*, ſaith, *Huic Mammæ ad pedis longitudinem.*

(*h*) Ariſt. *They have Arms like a Man, but hairy; and they bend them and the Legs as a Man does; the flection of the one being contrary to the other.*

The *Shoulder* and *Arm* of our *Pygmie* were very hairy outwards, not ſo hairy inwards. The Contratendency of the Hair here, as that of the *Shoulder* pointing downwards, and that of the *Arm* pointing upwards, like *Lucan*'s *Pila minantia Pilis*, I have already noted. This difference I ſhall here remark of this fore-limb in our *Pygmie*, as well as in *Apes* and *Monkeys*; that 'tis longer in them proportionably, than in *Man*. I ſhall examine this Part more particularly in the *Myology* and *Oſteology*.

But the Curvature or Flection of the *Arms* and *Legs* in our *Pygmie*, as alſo in *Apes* and *Monkeys*, is juſt the ſame as in *Man*; the *Arms* bending forwards, and the *Legs* backwards; whereas in other *Brutes*, the flection

(19) Ariſt. *ibid.* p. 151. (20) Ariſt. *ibid.* p. 176. (21) Albert. *de Animal.* lib. 22. p. 224. (22) Jac. Bontij *Hiſt. Nat. & Med.* lib. 5. cap. 32. p. 84. (23) Nic. Tulpij *Obſerv. Med.* l. 3. cap. 56. (24) Gaſſend. *de vita* Peireskij. lib. 5. p. m. 170.

of the fore and hinder *Legs* is both the ſame way. *Homini Genua & Cubita contraria* (ſaith (25) *Pliny*) *item Urſis & ſimiarum generi, ob id minime pernicibus.* I ſhall examine this Place of *Pliny* in the *Oſteology.*

(*i*) Ariſt. *Beſides they have Hands, Fingers, and Nails like a Man's, but all theſe ſomewhat ruder.*

The *Hand* of our *Pygmie* was different from a *Man's*, in that the *Palm* was much longer; ſo the *Thumb* too, was leſs than the other *Fingers*; whereas in a *Man*, the *Thumb* is uſually thicker than the reſt of the *Fingers:* In both theſe reſpects, it more reſembled the *Ape*-kind. But the *Fingers* of our *Pygmie* being ſo much bigger than thoſe of *Apes* and *Monkeys*; and its *Nails* being broader, and flatter, on both theſe Accounts it was liker a *Man. Ungues Clauſulæ Nervorum ſummæ exiſtimantur* (ſaith (26) *Pliny*) *omnibus hi, quibus & digiti: ſed Simiæ imbricati, Hominibus lati.*

In the *Palms* of the *Hands* of our *Pygmie* were remarkable thoſe *Lines* which are uſually taken notice of in *Palmeſtry*; and at the ends of the *Fingers* were thoſe *Spiral Lines*, which are uſually in a *Man's.*

(*k*) Ariſt. *The Feet are particular; for they are like great Hands, and the Toes like Fingers; the middlemoſt being the longeſt: And the Sole of the Foot like the Palm of the Hand, but more extended, or longer.*

Pliny (as I have remark'd) renders this Paſſage thus: *Pedibus paulum differunt, ſunt enim, ut manus, prælongi; ſed veſtigium Palmæ ſimile faciunt.* Now the *Palms* of the *Hands*, and the *Soles* of the *Feet* of our *Pygmie*, were equally long, and longer, proportionably, than in *Man*; and herein it reſembled more the *Ape*-kind: As it did likewiſe in the length of the *Toes*, which were as long as the *Fingers*, as alſo in having the middlemoſt *Toe* longer than the reſt. For in the *Hand* of a *Man*, the middle Finger is the longeſt, but in the *Foot*, the middle Toe is not. The *Philoſopher* does very well liken it to a Hand, ſince beſides the length of the *Toes*, like *Fingers*, it had the *great Toe*, like the *Thumb* ſet off at a diſtance from the range of the other Toes, as we ſhall ſhew hereafter.

(*l*) Ariſt. *The ſole of the Foot in the hinder part was more callous, ill, and odly imitating a Heel: For they uſe their Feet in both Capacities, both as a Hand and Foot, and bend them like Hands.*

In the *Ape*-kind there is a true *Os Calcis*, beſides this *Calloſity.* And in our *Pygmie* this *Heel-bone* was liker that in a Man, than theirs is. The *Philoſopher* in the former *Paragraph* ſhewed what reſemblance this Part had to a *Humane Hand*, in this, by reaſon of the *Os Calcis*, how 'tis like

(25) Plinij *Nat. Hiſt.* l. 11. cap. 45. p. m. 594. (26) Plinij *Nat. Hiſt.* lib. 11. cap. 45. p. 594.

a *Foot*;

a *Foot*; and then makes an Inference from the different ſtructure of this *Organ*, that it performs the Uſes and Offices of both.

All which is very agreeable to our *Pygmie*. But this *Part*, in the Formation and it's Function too, being liker a *Hand*, than a *Foot*; for the diſtinguiſhing this ſort of *Animals* from others, I have thought, whether it might not be reckoned and call'd rather *Quadru-manus* than *Quadrupes*, i. e. a *four-handed*, than a *four-footed Animal*.

And as it uſes it's hinder *Feet* upon any occaſion, as *Hands*; ſo likewiſe I obſerved in our *Pygmie*, that it would make uſe of it's *Hands*, to ſupply the place of *Feet*. But when it went as a *Quadruped* on all four, 'twas awkwardly; not placing the *Palm* of the *Hand* flat to the Ground, but it walk'd upon it's Knuckles, as I obſerved it to do, when weak, and had not ſtrength enough to ſupport it's Body. So that this *Species* of *Animals* hath the Advantage of making uſe of their *Feet* as *Hands*, and their *Hands* as *Feet*, as there is occaſion.

(*m*) Ariſt. *The* Os Humeri, *and the* Os Femoris *are ſhort, in reſpect of the* Ulna *and* Tibia.

In a *Humane Skeleton*, the *Os Humeri*, and the *Os Femoris* are much longer than the *Ulna* and *Tibia*. For in a *Skeleton* of a Woman I have by me, the *Os Humeri* was Twelve Inches and a half, and the *Os Femoris* Seventeen Inches long; whereas the *Ulna* was but Nine Inches and three quarters, and the *Tibia* Fourteen Inches long. In our *Pygmie*, the *Os Humeri* was Five Inches and a half, and the *Os Femoris* Five Inches long. The *Ulna* was Five Inches and a half, and the *Tibia* was Four Inches long. Theſe *Bones* in the *Skeleton* of a *Monkey*, were much of the ſame length with our *Pygmie*'s, ſo that herein both differ from a *Man*, and our *Pygmie* more reſembles the *Ape-kind*.

(*n*) Ariſt. *They have no prominent Navel, but ſomething hard in this place of the Navel.*

In our *Pygmie* the *Umbilicus* or Navel appeared very fair, and in the exact Place, as 'tis in a Man; not prominent nor harder, but in all reſpect Natural and alike.

(*o*) Ariſt. *They have the upper Parts much larger than the lower, as being Quadrupeds, almoſt as five to three; and as upon this account, ſo becauſe they have Feet like Hands, as if they were compounded of a Hand and Foot: Of a Foot, in reſpect of the Heel behind; and of a Hand, as to the other Parts; for they have Fingers, and what we call the Palm.*

In Quadrupeds uſually the *Upper* or fore-parts are much larger than the *Lower* or hinder; and 'tis ſo in the *Ape* and *Monkey*-kind, as the *Philoſopher* Remarks. But in our *Pygmie* I think this Obſervation will not hold. For tho' it was much emaciated, by reaſon of it's long illneſs, ſo that it ſeemed very thin and lank in the *Belly*; yet behind it look'd ſquare enough, and proportionable as a Man. But the *Orang-Outang* of *Tulpius* had

had a large ſquob *Belly*. We ſhall preſently give the Dimenſions of all the Parts, as ſoon as we have done with this *Text* of *Ariſtotle*.

We ſhall hereafter farther conſider the ſtructure of the *Foot* in the *Oſteology*, where we ſhall deſcribe the *Os Calcis*, and ſhew how well it performs its Office, when this *Animal* ſtands erect. But ſince *Nature* deſign'd it not always to live on the Ground, but to get it's Prey in the Trees likewiſe, it hath very wiſely formed this Part like a Hand, by which means it can more eaſily climb them; and when there, ſhift much better by this Contrivance; as I have ſhewn in my Diſcourſe (27) upon the *Carigueya, ſeu Marſupiale Americanum*, or the *Anatomy* of an *Opoſſum*; which *Animal* had its hinder *Feet* formed like *Hands*.

(*p*) Ariſt. *They live moſt of their time as Quadrupeds more than as Bipeds, or erect.*

Our Merchants tell me, when firſt they take *Apes* or *Monkeys*, to learn them to go erect, they uſually tye their Hands behind them. And I am of the *Philoſopher's* Mind, that Naturally they go more on all Four, than erect. But whether 'tis ſo in our *Pygmie*, I do ſuſpect; ſince walking on it's Knuckles, as our *Pygmie* did, ſeems no Natural Poſture; and 'tis ſufficiently provided in all reſpects to walk erect.

(*q*) Ariſt. *As Quadrupeds they have no Buttocks; as Bipeds, no Tails; or but very little, like a ſhew of one.*

Our *Pygmie* had *Buttocks* or *Nates*, as we ſhall ſee in the *Myology*, but not ſo much as in *Man*. The *Os Iſchij* or *Coxendix* was very different, as appears in the *Skeleton*, and as I ſhall deſcribe in the *Oſteology*. Our *Pygmie* had no *Tail*, but an *Os Coxygis*, as is in Man, which outwardly made a little appearance, as in my *Second Figure*, and may be what *Ariſtotle* Remarks. *Scaliger* has this Note upon it: *Caudæ notam ſive veſtigium animadvertit, quam vix Oculis deprehendas. Tactu tamen ſubeſſe intelligas, quam ſi attractare tentes, promptâ mirâque celeritate ſeſe ſubtrahit, ridiculâ indignatione læſum præ ſe fert.*

(*r*) Ariſt. *The Female hath the Privy-parts, like a Woman; but the Male, more like a Dog's, than a Man's.*

Our Subject was a *Male*, and this Part here was nothing like a *Dog's*. For in the *Penis* of a *Dog* there is a large *Bone*, which is not in the *Ape* and *Monkey*-kind. *Scaliger's* Note here does not make out the Aſſertion: *Caninum Genitale dixit Simij, non temerè; nodos enim quoſdam deprehendimus: differt autem figurâ Glandis.* I did not obſerve theſe Nodes here; but of this, more in the *Anatomy* of this Part.

(*s*) Ariſt. *The* Cebi (*as was ſaid before*) *have Tails: As to the Viſcera they have them all like a Man's.*

(27) *Philoſoph. Tranſact.* Numb. 239.

So

So *Pliny*, *Viſcera etiam interiora omnia ad Exemplar.* But I find this a great Miſtake. For, as we ſhall ſhew, our *Pygmie*, who comes much nearer to a *Man* in the Structure of the inward Parts, than either *Apes* or *Monkeys*, yet in a great many things is very different; but where it is ſo, there it reſembles an *Ape*. But on the other hand, *Albertus Magnus* is much more miſtaken, who will not allow any likeneſs at all. For ſpeaking of an *Ape*, he tells us, (28) *Et ſicut in ante habitis diximus, homini in exterioribus ſimile exiſtens, in nullo ſimilitudinem habet cum interioribus hominis, & minùs fere omnibus aliis Beſtiis.* *Galen* (29) is much more in the right, who acknowledges a very great ſimilitude between an *Ape* and a *Man*, both in the outward and inward Parts, where he tells us, Καὶ ὁ πίθηκος ἁπάντων τῶν ζώων ὁμοιόλατος ἀνθρώπῳ, καὶ σπλάγχνοις, καὶ μυσὶ, καὶ ἀρτηρίαις, καὶ φλεψὶ, καὶ νεύροις, ὅτι καὶ τῇ τῶν ὀστῶν ἰδέᾳ. Διὰ γὰρ τὴν τέτων φύσιν ὅτι τε δυσὶν βαδίζει σκελοῖν, καὶ τοῖς προσθίοις κώλοις ὥσπερ χερσὶ χρῆται, καὶ στέρνον πλατύτατον ἁπάντων τῶν τετραπόδων ἔχει, καὶ κλεῖς ὡσαύτως ἀνθρώπῳ, καὶ πρόσωπον στρογγύλον, καὶ τραχήλου μικρόν. i. e. *An* Ape *is the moſt like a Man of any Quadruped: In the* Viſcera *and the Muſcles, and in the Arteries, and Veins and Nerves, becauſe 'tis ſo in the ſtructure of the Bones. For 'tis from their make, that it walks on two Legs, and uſes its fore-limbs as Hands. It hath the largeſt Breaſt of any Quadruped, and Clavicles or Collar-bones like a Man, and a round Face, and a ſmall or ſhort Neck.*

All which is very agreeable to our *Pygmie*, whom we ſhall find more exactly to anſwer this Character, than an *Ape*. And now having compared our *Pygmie* with this general Deſcription that *Ariſtotle* gives of the *Ape*-kind; we ſhall compare him with himſelf, by taking the different *Dimenſions* of the ſeveral *Parts*, as well as of the whole *Body*; and ſhall obſerve what Proportions they had to one another.

As from the top of the Head, to the heel of the Foot in a ſtrait Line, it meaſured Twenty ſix Inches. The Girth of the Body in the biggeſt part about the *Cartilago Enſiformis*, was Sixteen Inches; over the Loins 'twas Ten Inches about. The Compaſs of the Head over the Eyes and Ears, Thirteen Inches and a half. The aperture of the Eye-lids, three quarters of an Inch. From one corner of the Mouth, to the other, Two Inches and a quarter. From the middle of the upper Lip to the Eye-brow, 'twas two Inches three quarters. From the Eye-brow to the *Occiput* Seven Inches and a half. The Perpendicular Diameter of the Ear from the Top to the Lobe, was Two Inches and a half. The Horizontal Diameter of the Ear was an Inch and half. The Verge or Compaſs of the Ear about, was near Five Inches and a half. Where the Ear was faſtened to the Head, it meaſured above an Inch and half. From the *Clavicula* or Collar-Bone, to the *Penis*, Ten Inches. From the *Cartilago Enſiformis* to the Navel, Three Inches and a half. From the Navel to the *Penis*, Three Inches. The diſtance between the two Teats, Three Inches

(28) Albertus *De Animal.* lib. 22. p. 224. (29) Galen. *de Anat. Adminiſt.* lib. 1. cap. 2. p. m. 26.

and

and a quarter. The length of the Arm, from the Shoulder to the end of the Fingers, Seventeen Inches. The Girth of the Shoulder about the middle, Four Inches and a quarter; of the Arm near the Elbow, Five Inches. The Hand from the Wriſt to the end of the Middle Finger, meaſured Five Inches and an half. The Thumb was an Inch and a quarter long; the Fore-Finger Two Inches, the Middle-Finger Two Inches and an half; the Ring-Finger Two Inches and a quarter, and the Little Finger One Inch and an half long. The Girth of the Thumb and the Little Finger, was One Inch; the Girth of the other Fingers was an Inch and a quarter. The Palm of the Hand was Three Inches long, and an Inch and three quarters broad.

From the head of the Thigh-Bone to the Heel, it meaſured Twelve Inches: From the Heel to the end of the Middle-Toe (which was the longeſt) Five Inches three quarters. The Girth of the Thigh was Six Inches; of the Leg at the Calf, Four Inches and a quarter; of the Foot at the ſetting on of the Great Toe, near Five Inches. The Great Toe was an Inch and half long, the Fore-Toe One Inch, the Middle-Toe an Inch and half, the Third Toe an Inch and a quarter, the Little Toe One Inch long. The Sole of the Foot, about the ſetting on of the Great Toe (where 'twas broadeſt) was Two Inches over; but nearer the Heel, 'twas an Inch and half broad. The Girth of the Great Toe, where biggeſt, an Inch and half; the other Toes were an Inch about. Theſe Meaſures were taken before the Skin was ſtrip't off, in the *Skeleton*, or the Skin ſtuff'd, they may prove otherwiſe.

And having now given theſe *Dimenſions* of the whole, and of moſt of the External Parts; you will the better conceive the exact ſhape of this wonderful *Animal* by the *Figures* I have cauſed to be made of it. As the *Firſt Figure* repreſents our *Pygmie* erect, where you have a *view* of all the *Fore-Parts*. Being weak, the better to ſupport him, I have given him a Stick in his Right-Hand. But our *Figure* being made after he was dead, the *Head* ſeems too much fallen in between the Shoulders, as if it had a very ſhort or little or no *Neck*, which takes off from the Beauty of the *Figure*; but this is rectified and mended in the Figure of the *Skeleton*, where you will ſee the *Neck* proportionate. The *Head* here is large and globous; the *Ears* ſtanding off, not lying cloſe. The *Face* looks like an Old wither'd Man's, which without doubt was render'd much more ſo, by an *Ulcer* it had in one of it's *Cheeks*, occaſioned by a Fall it had on Ship-board upon a Cannon, which forced out one of it's Teeth; and the *Jaw-bone* afterwards proving carious, it might haſten it's Death. The riſing of the *Cranium* juſt under the *Eye-lids*, as I have remark'd, is different from what is in a Man, and renders the *Face* harder; as does likewiſe it's flat *Noſe*, and the *Upper Jaw* being more prominent, and leſſer ſpread, than in a *Man*; and it's *Chin* or *Under Jaw* being ſhorter. The *Eyes* were a little ſunk, the *Mouth* large, the *Teeth* perfectly Humane. The *Face* was without Hair, and the Colour a little *Tawny*; the *Skin* on the reſt of the Body was white.

The

The *Shoulders* are ſpread and large, the *Thorax* or *Breaſt* extended altogether like a *Man's*, the *Mammæ* and *Teats* the ſame; the *Belly* was lank and pinch'd in, not prominent, by reaſon of it's illneſs; but here it held a more proportionable breadth to a *Man's*, than a *Quadruped's*. The *Arms* were longer than in a *Man*, and ſo were the *Palms* of the Hands; but the *Thumb* was much leſs, the *Nails* exactly like a *Man's*, and the *Navel* the ſame. The *Penis* was different, as we ſhall hereafter ſhew. Here was no *Scrotum*, but the *Teſtes* were contained in the Region of the *Pubis* under the Skin, which made it here more protuberant. The *Thighs* and *Legs* were ſomewhat divaricated or ſtradling, for want of ſtrength, either from it's illneſs, or being but young. We obſerved *Calves* in it's Legs; the *Feet* long, as likewiſe the *Toes*, which were liker Fingers; and the *Great Toe* exactly like a *Thumb*, more than that on the *Hand*.

The *Second Figure* repreſents the *hinder Parts* of this Creature, in an Erect Poſture likewiſe. Where may be obſerved, the Globous Figure and largeneſs of the *Head*, with the *Ears* ſtanding off; the curious ſhape and ſtraitneſs of the *Back*, and how it ſpreads. At the *Os Coxygis* there is a little Protuberance, but nothing like a *Tail*.

In this *Figure* I have repreſented him with the *Fingers* of one Hand *bended*, as if kneeling upon his Knuckles, to ſhew the Action, when he goes on all four: For the Palms of his Hands never touch the Ground, but when he *walks* as a *Quadruped*, 'tis only upon his *Knuckles*. The other Hand is holding a Rope, to ſhew his Climbing; for he will nimbly run up the Tackle of a Ship, or climb a Tree: And having this hold, he is the better ſupported, to ſhew the *Sole* of the left Foot, and the *Heel* there; on account of which Heel it may be thought a *Foot*: But the *Great Toe* being ſet off ſo far from the range of the others, and they all being ſo large and long, it more reſembles a *Hand*, as has been obſerved.

If we compare *our Figures* with thoſe given by *Tulpius*, *Bontius*, and *Geſner*, we ſhall find a great difference. That of *Tulpius* ſeems the moſt Natural; but being made ſitting, it does not ſo well repreſent the Proportions of the ſeveral Parts. The *Chaps* or *Roſtrum* is longer, and 'tis leſs hairy in the fore-parts than ours. The *Mammæ* are larger and pendulous, and the *Belly* more protuberant. *Dapper*, (30) in his Deſcription of *Africa*, has borrowed this *Figure* from *Tulpius*, without naming him, as likewiſe his *Deſcription*, which is the ſame. For avoiding the often quoting it, I will here Tranſcribe *Tulpius's* Account: But why I think it not a *Satyr*, as *he* and *Dapper* make it, I will give my Reaſons in the *following Eſſay*. *Tulpius* his words are theſe: (31)

(30) Dapper *Deſcript. de l' Afriqu.* p. m. 365. (31) *Obſervat. Med.* lib. 3. cap. 56.

Quamvis extra forum Medicum, attexam tamen huic telæ, Satyrum Indicum; noſtrâ memoriâ, ex Angolâ delatum: & Frederico Henrico, Arauſionenſium Principi, dono datum. Erat autem hic Satyrus quadrupes: ſed ab humanâ ſpecie, quam præ ſe fert, vocatur Indis Orang-Outang: ſive homo Sylveſtris, uti Africanis Quoias morrou. Exprimens longitudine puerum trimum; ut craſſitie ſexennem.

Corpore erat nec obeſo, nec gracili, ſed quadrato: habiliſſimo tamen, ac perniciſſimo. Artubus verò tam ſtrictis, & muſculis adeò vaſtis: ut quidvis & auderet, & poſſet. Anteriùs undique glaber: at ponè hirſutus, ac nigris crinibus obſitus. Facies mentiebatur hominem: ſed nares ſimæ, & aduncæ, rugoſam, & edentulam anum.

Aures verò nihil diſcrepare, ab humanâ formâ. Uti neque pectus; ornatum utrinque mammâ prætumidâ (erat enim ſexûs fœminini); venter habebat umbilicum profundiorem; & artus, cum ſuperiores, tum inferiores, tam exactam cum homine ſimilitudinem: ut vix ovum ovo videris ſimilius.

Nec cubito defuit requiſita commiſſura: nec manibus digitorum ordo: nedum pollici figura humana: vel cruribus ſuræ: vel pedi calcis fulcrum. Quæ concinna, ac decens membrorum forma, in cauſsâ fuit, quod multoties incederet erectus: neque attolleret minùs gravatè, quàm transferret facilè, qualecunque, graviſſimi oneris, pondus.

Bibiturus prehendebat canthari anſam, manu alterâ; alteram verò vaſis fundo ſupponens, abſtergebat deinde madorem labiis relictum, non minùs adpoſitè, ac ſi delicatiſſimum vidiſſes aulicum. Quam eandem dexteritatem obſervabat utique cubitum iturus. Inclinans quippe caput in pulvinar, & corpus ſtragulis convenientèr operiens, velabat ſe haud alitèr, ac ſi vel molliſſimus illic decubuiſſet homo.

Quin imò narravit aliquandò affini noſtro, Samueli Blomartio, Rex Sambacenſis, Satyros hoſce, præſertim mares, in Inſulâ Bornæo, tantam habere animi confidentiam, & tam validam muſculorum compagem: ut non ſemel impetum fecerint, in viros armatos: nedùm in imbellem, fœminarum, puellarumve, ſexum.

Quarum interdùm tàm ardenti flagrant deſiderio: ut raptas non ſemel conſtuprarint. Summè quippe in venerem ſunt proclives (quod ipſis, cum libidinoſis veterum Satyris commune) imò interdùm adeò protervi, ac ſalaces: ut mulieres Indicæ, propterea vitent, cane pejus & angue, ſaltus, ac luſtra, in quibus deliteſcunt impudica hæc animalia.

Dapper, who hath tranſcribed this Account of *Tulpius*, (as I ſaid) but without taking any notice of him, makes this Preface to it. "*The* "Quoias Morrou (*of which I have ſpoken in the Kingdom of* Quoia) "*are bred likewiſe in the Kingdom of* Angola. *This Animal, as it hath a* "*great deal of a Man, ſo a great many have thought it to be the Iſſue of a* "*Man and an Ape: But the* Blacks *themſelves reject this Opinion.* Now in the Place that *Dapper* refers to, he ſeems to give it as the Opinion of the *Blacks*, that they are the Iſſue of Men; but that by their always living

living in the Woods, they are become *half-Beasts*. I shall transcribe his Words, and so have done with him: (32) *On trouve dans les bois une Espece de Satyre que les Negroes appellent Quoias-Morrou, & les Portugais, Salvage. Ils ont la tête grosse, le Corps gros et pesant, les bras nerveux, ils n'ont point de queue, et Marchent tantôt tout droit, et tantôt à quatre pieds. Les Animaux se nourrissent de fruits et de Miel Sauvage, & se battent à tout moment les uns contre les autres. Ils sont issu des Hommes, à ce disent les Negroes, mais ils sont devenus ainsi demi-bêtes en se tenant toûjours dans les Forêts. On dit qu'ils forcent les femmes & les filles, & qu'ils ont le courage d' attaquer des Hommes armez.*

We will now examine *Jacobus Bontius*'s *Figure*, and compare it with ours: And tho' he tells us, that he had seen some of both Sexes that went erect, especially that *Female one*, whose *Effigies* he here gives us; yet I can't but think, he indulged more his Fancy herein, than copied the true Life; or at least it was much different from ours. For ours had no such long *Hair* on the Head, and all round the Face; the *Face* of our *Pygmie* was not so flat and round, nor the *Nose* and *Under-Lip* so rising: The large *Breasts* in his, answers the Description which is given of it by others; ours being a *Male*, had but small ones. But the *Armes* in our *Pygmie* (as 'tis in the *Ape*-kind) were much longer than they are represented in his *Figure*, and the *Feet* are altogether different; for he makes them exactly like *Humane Feet*, and nothing like *Hands*, which is so Remarkable a thing in all these *Animals*, that this Mistake of it self, is enough to discountenance the Truth of his *Picture*, and render it suspected. I shall not take notice, how ill the *Hair* is drawn, nor make any further Remarks upon the structure of the *Limbs*, since I confess I do mistrust the whole *Representation*. But because he hath expres's'd, that this Creature had so much Modesty, I have added to his *Figure* what becomes that Character.

That Figure in *Conradus Gesner*, (33) which he tells us he had out of a *German* Book, wrote about the Holy Land, in some Particulars I think more exact and just: For here he makes the *Feet* like *Hands*, the *Legs* more divaricated, the *Face* longer, and the *Rostrum* more extended. But the *Arms* are too short, and I do not know for what reason there is a *Tail* clap't on, which sits untowardly enough, which must be surely an Addition of the *Painter*; or if there is any such Creature in Nature, it must be of another Family, different from ours.

However, I have caused all these *Figures* to be copyed, that they may be the easier compared: But since they are so disagreeing, as are likewise

(32) Dapper *ibid.* p. m. 257. (33) *Hist. de Quadruped.* p. m. 859.

the Deſcriptions they give of them, it ſufficiently juſtifies my Complaint of the uncertainty we have of the true *Animal*, that they are diſcourſing about; ſince the ſame Name probably may be given to different *Species* of the *Ape*-kind. Now *Orang-Outang*, or *Homo Sylveſtris*, or the *Wild Man*, being a *General Name*, I have given it alſo to our Subject: Tho' I confeſs I am not fully ſatisfied whether it be exactly the ſame with that of *Tulpius* or *Bontius*; or even whether that of *Bontius* be the ſame with that of *Tulpius*. For *Bontius* his Account is ſo very imperfect, that from thence one cannot make a ſafe Concluſion; and I rather ſuſpect the contrary: For *Bontius* deſcribes it with ſoft, tender Paſſions; *Tulpius* and *Dapper* make it Warlike and Fighting. *Bontius*'s words are theſe: (34) *Aſt quod majorem meretur admirationem, vidi ego aliquot utriuſque ſexûs erectè incedentes, imprimis eam (cujus Effigiem hic exhibeo) Satyram femellam, tanta verecundia ab ignotis ſibi hominibus occulentem, tum quoque faciem manibus (liceat ità dicere) tegentem ubertimque lachrymantem, gemitus cientem, & cæteros humanos actus exprimentem, ut nihil ei humani deeſſe diceres, præter loquelam. Loqui verò eos eaſque poſſe, Javani aiunt, ſed non velle, nè ad labores cogerentur: ridicule mehercules. Nomen ei indunt* Ourang Outang, *quod Hominem Sylvæ ſignificat, coſque naſci affirmant è Libidine Mulierum Indarum, quæ ſe Simiis & Cercopithecis deteſtandâ libidine miſcent:*

Nec pueri credunt, niſi qui nondum æra lavantur.

And then adds, that in *Borneo* there are theſe *Wild Men*, and with *Tails*, but much ſhorter than that pictured in *Geſner*. *Porrò in Inſulâ Borneo* (ſaith *Bontius*) *in Regno Succodana dicto, à noſtris Mercatoribus propter Oryzam & Adamantes frequentato, Homines montani Caudati in interioribus Regni inveniuntur, quos multi è noſtris in Aulâ Regis Succodanæ viderent. Cauda autem illis eſt prominentia quædam oſſis Coccygos, ad quatuor, aut paulò ampliùs, digitos excreſcens, eodem modo, quo truncata cauda* (*quos nos* Spligiones *vocamus*) *ſed depilis.*

'Tis for this Reaſon therefore, that I might more particularly diſtinguiſh our *Animal*, that I have call'd it a *Pygmie*; a *Name* that was formerly given to a ſort of *Ape*, as I ſhall prove. But the *Poets* and *Hiſtorians* too of former Ages have invented ſo many improbable Stories about them, that they have rendred the whole *Hiſtory* concerning them ridiculous, and not to be believed. We ſhall therefore endeavour to diſtinguiſh the *Truth* from the *Fables* in the following *Eſſay*.

The *Baris* or *Barris* likewiſe ſeems to be an *Ourang Outang*, or a *Wild Man*; but whether exactly the ſame with ours, I will not determine, but leave to farther Enquiry. For all the Accounts concerning it that I

(34) Jac. Bontii, *Hiſt. Nat. & Med.* lib. 5. cap. 32.

hare

have at preſent met with, relate rather it's Docility and Actions, and the Servile Offices 'tis capable of performing in a Family, than any thing particular as to the Deſcription of the Body; only in general that 'tis an *Ape* like a *Man*. Thus *Peter Gaſſendus* (35) in the *Life* of *Peiresky* tells us, that in *Java Major* were obſerved by the *Sieur de Saint-Amant*, *Animalia quæ forent Naturæ homines inter & ſimias mediæ*; which being doubted of, *Peiresky* produced a Letter from *Natalis* or *Noël*, a Phyſician who lived in *Africa*, which gave him this Account. *Eſſe in Guineâ Simias, barbâ procerâ, canâque, & pexâ propemodùm venerabileis, incedere ipſos lentè, ac videri ſibi præ cæteris ſapere: qui maximi ſunt, & Barris dicuntur, pollere maximè judicio; ſemel duntaxat quidpiam docendos; veſte indutos illicò bipedes incedere; ſcitè ludere fiſtulâ, Citharâ, aliiſque id genus (nam quod everrant domum, convertant veru, pinſant in mortario, aliaque ratione famulatum præſtant, haud reputari admodum) fœminas denique in iis pati menſtrua, & mares mulierum eſſe appetentiſſimos.* He likewiſe produced other Letters from *Arcoſius* or *d' Arcos*, which related what happened to one of *Ferraria* when he was at *Angola*, the Country from whence our *Animal*, as likewiſe that of *Tulpius* came. I will give it in *Gaſſendus*'s words: *Incidit nempè quâdam die in Nigritam Canibus venantem Homines ut viſum, Sylveſtreis. Capto, cæſoque iſtorum uno, inhumanitatem Nigritæ increpuit, qui in ſuum genus ità ſæviret. Ille verò, falleris, inquit, nam hic non eſt homo, ſed bellua homini perſimilis. Quippe ſolâ paſcitur herbâ, inteſtinaque Ovina habet, quod ut credas meliùs, rem ecce; ſimulque abdomen aperuit. Sequenti die rurſus venatum, captique mas & fœmina: huic Mammæ ad pedis longitudinem: cæterà mulieri ſimillima fuit; niſi quod Inteſtina quoque herbis oppleta, & cujuſmodi Ovis, habuit. Totum utique piloſum Corpus, ſed pilo brevi, ac ſatis leni.*

Our *Animal* was not ſo bearded, as that of *Natalis*; and what *Arcoſius* relates of his *Wild Man*, or *Barris*; as it's feeding upon Graſs, and having it's *Inteſtines* like a *Sheep*'s, all this is far different from ours; tho' as to it's docility and capacity of performing thoſe Actions mentioned, I can't but think our Subject might eaſily have been taught to do them; and, it may be, others too of the *Ape*-kind, tho' different: As there are wonderful Inſtances of this kind given of them by *Nierembergius* (36) and others. *Dapper*'s (37) Deſcription is much the ſame. *There is a ſort of Ape* (ſaith he) *call'd* Baris, *which they take when young, and breed them up, and make them ſo tame, that they will do almoſt all the Work of a Slave: For they go ordinarily upright as Men do; they will beat Rice in a Mortar, carry Water in a Pitcher, and ſhew ſuch pretty Actions of Addreſs, that they extreamly divert their Maſters.* And in *Nierembergius* (38) there is much the ſame Account. "In Guineâ ſcribit P. Jar-
"ricus exiſtere Simias, quæ inſtar famuli in Pilâ tundant quæcunque in

(35) *Lib.* 5. p. m. 171. (36) *Hiſt. Nat.* lib. 9. cap. 44. (37) Dapper *Deſcript. de l' Afrique.* p. 249. (38) *Hiſt. Nat.* l. 9. cap. 45.

"eam

" eam imponuntur, quæ aquam à fluviis in Hydriis capite domùm defe-
" rant, ità tamen ut ubi primùm domûs fores attigerint, illicò Hydriis
" exonerandæ ſint, alioqui eas excidere, caſuque iſto frangi, atque tùm
" clamoribus ac fletu compleri univerſa. Neque iſta modo, ſed plurima
" item alia obire de domeſticis miniſteriis dicuntur hi Simij Baris. To-
" roſi ſunt & robuſti.

But all this does not ſufficiently inform us of the particular ſhape, ſtructure, and make of the Body and the ſeveral Parts of this *Animal*, ſo as to be fully certain whether it be the ſame, or a different Creature from the *Ourang-Outang*. And tho' I have mentioned it, as a Conjecture that probably the *Baris* might be, what we call a *Drill*, yet I own it as an uncertainty, ſince I have not met with what can juſtifie, or fully ſatisfie me herein.

The *Pongo* likewiſe which is deſcribed by *Purchas*, as a ſort of *Wild Man*, is different from our Subject; as it may be alſo from the reſt hitherto mentioned. The Reaſon, therefore, why I inſert the Deſcription of this, as likewiſe of the others, I own to be, that hereby I might excite ſome *Inquiſitive Obſervers* to give us a truer Account of this large and noble *Species* of *Animals*. 'Tis an Enquiry that would recompence their Curioſity with abundance of Satisfaction, by the many and uſeful Diſcoveries that they would make, and extreamly enrich the *Natural Hiſtory* of *Animals*, whoſe enlargement, I think, in this *Inquiſitive Age*, hath not advanced ſo much as that of *Botanie*. For how great Diligence hath been uſed of late, to ranſack both the *Indies*, to pry into all the Corners of the World, both inhabited, and uninhabited, to find out a new *Plant*, not before deſcribed? And with what great Expence, and how magnificently are their *Figures* Printed? And how little hath been done in the Improvement of the *Hiſtory* of *Animals*? Not that I any ways diſlike the former, but the latter being a *Nobler* Subject, I can't but recommend it, as deſerving the Labours of the *Curious* likewiſe; and if any, this kind, I think, which comes ſo near to a Man, may beſpeak the preference.

But I beg the Reader's Pardon for this Digreſſion. *Purchas*'s (39) words are theſe: *This* Pongo *is in all Proportions like a Man, but that he is more like a Giant-Creature, than a Man: For he is very tall, and hath a Man's Face, hollow-eyed, with long Hair upon his brows. His Face and Ears are without Hair, and his Hands alſo. His Body is full of Hair, but not very thick, and it is of a dunniſh colour. He differeth not from a Man, but in his Legs, for he hath no Calf. He goeth always on his Legs, and carries his Hands claſped on the Nape of his Neck, when he goeth upon the Ground.*

(39) Purchas *Pilgrims*, *Part.* 2. l. 7. cap. 3. §. 7.

They

They ſleep in the Trees, and build ſhelters for the Rain. They feed upon Fruits that they find in the Woods, and upon Nuts; for they eat no kind of Fleſh. They cannot ſpeak, and have no Underſtanding, no more than a Beaſt. The People of the Country, when they Travel in the Woods, make Fires, where they ſleep in the Night: And in the Morning when they are gone, the Pongoes *will come and ſit about the Fire, till it goeth out; for they have no Underſtanding to lay the Wood together. They go many together, and kill many* Negroes *that Travel in the Woods. Many times they fall upon Elephants, which come to feed where they be, and ſo beat them with their clubbed Fiſts, and pieces of Wood, that they will run away roaring from them. Theſe* Pongoes *are never taken alive, becauſe they are ſo ſtrong, that Ten Men cannot hold one of them: But yet they take many of their Young Ones with poiſoned Arrows. The Young* Pongo *hangeth on his Mother's Belly, with his Hands faſt claſped about her; ſo that when any of the Country People kill any of the Females, they take the Young one which hangeth faſt upon his Mother. When they die among themſelves, they cover the Dead with great heaps of Boughs and Wood, which is commonly found in the Forreſts.*

Our *Pygmie* had *Calves* in his Legs, tho' not large, being emaciated; and it being young, I am uncertain to what height in time it might have grown; tho' I cannot think to the juſt Stature (if there be any ſuch) of a Man. For different Nations extreamly vary herein, and even thoſe of the ſame. Nor did our *Pygmie* ſeem ſo dull a Creature as theſe *Pongoes*, but on the contrary, very apprehenſive, tho' nothing ſo robuſt and ſtrong as they are repreſented to be.

I ſhall only further add what *le Compte*, a Modern Writer, tells us of the *Savage Man*, and ſo I think I ſhall have done: For this Argument is ſo Fruitful, that one does not know when to conclude. (40) *Lewis le Compte* therefore in his *Memoirs and Obſervations upon China*, tells us, *That what is to be ſeen in the Iſle of* Borneo, *is yet more Remarkable, and ſurpaſſeth all that ever the Hiſtory of Animals hath hitherto related to be the moſt admirable, the People of the Country aſſure us, as a thing notoriouſly known to be true: That they find in the Woods a ſort of Beaſt, called the* Savage Man; *whoſe Shape, Stature, Countenance, Arms, Legs, and other Members of the Body, are ſo like ours, that excepting the Voice only, one ſhould have much ado not to reckon them equally Men with certain Barbarians in* Africa, *who do not much differ from Beaſts.*

This Wild or Savage Man, of whom I ſpeak, is endued with extraordinary ſtrength, and notwithſtanding he walks but upon two Legs; yet is he ſo ſwift of Foot, that they have much ado to out-run him. People of Quality

(40) Pag. m. 510.

Courſe

Courſe him, as we do Stags here, and this ſort of Hunting is the King's uſual Divertiſement. His Skin is all hairy, his Eyes ſunk in his Head, a ſtern Countenance, tanned Face; but all his Lineaments are pretty proportionable, although harſh, and thickned by the Sun. I learn'd all theſe Particulars from one of our French *Merchants, who hath remained ſome time upon the Iſland. Nevertheleſs, I do not believe a Man ought to give much Credit to ſuch ſort of Relations, neither muſt we altogether reject them as fabulous; but wait till the unanimous Teſtimonies of ſeveral Travellers may more particularly acquaint us with the Truth of it.*

Paſſing upon a time from China *to the Coaſt of* Coramandel, *I did my ſelf ſee in the Straits of* Molucca *a kind of Ape, that might make pretty credible that which I juſt now related concerning the* Savage Man.

It marches naturally upon it's two hind Feet, which it bends a little, like a Dog's, that hath been taught to Dance, it makes uſe of it's two Arms as we do; it's Viſage is in a manner as well favoured, as theirs of the Cape of Good Hope; *but the Body is all covered with a white, black, or grey Wool: As to the reſt, it cries exactly like a Child; the whole outward Action is ſo Humane, and the Paſſions ſo lively and ſignificant, that dumb Men can ſcarce expreſs better their Conceptions and Appetites. They do eſpecially appear to be of a very kind Nature; and to ſhew their Affections to Perſons they know and love, they embrace them, and kiſs them with tranſports that ſurpriſe a Man. They have alſo a certain motion, that we meet not with in any Beaſt, very proper to Children, that is, to make a noiſe with their Feet, for joy or ſpight, when one gives, or refuſes them what they paſſionately long for.*

Although they be very big, (for that I ſaw was at leaſt four Foot high) their nimbleneſs and ſlight is incredible; it is Pleaſure beyond expreſſion to ſee them run up the Tackling of a Ship, where they ſometimes play, as if they had a particular knack of Vaulting to themſelves, or as if they had been paid, like our Rope-Dancers, to divert the Company.

Sometimes ſuſpended by one Arm, they poiſe themſelves for ſome time negligently to try themſelves, and then turn, all on the ſudden, round about a Rope, with as much quickneſs as a Wheel, or a Sling that is once put in motion; ſometimes holding the Rope ſucceſſively with their long Fingers, and letting their whole Body fall into the Air, they run full ſpeed from one to the other, and come back again with the ſame ſwiftneſs. There is no Poſture but they imitate, nor Motion but they perform; bending themſelves like a Bow, rowling like a Bowl, hanging by the Hands, Feet, and Teeth, according to the different Fancies which their whimſical Imagination ſupplies them with, which they Act in the moſt diverting manner imaginable; but their Agility to fling themſelves from one Rope to another, at Thirty and Fifty Foot diſtance, is yet more ſurpriſing.

In

In this Character there are ſeveral things I could take notice of, and I may hereafter have occaſion to refer to ſome of the Particulars; But what is mention'd of it's *Cry*, like a Child's; and it's expreſſing the *Paſſions* of Joy and Grief, by making a Noiſe with it's Feet, is agreeable enough to the Relation I had of our *Pygmie*: For I heard it *Cry* my ſelf like a *Child*; and he hath been often ſeen to kick with his Feet, as Children do, when either he was pleaſed or angered.

We ſhall now proceed to the *Anatomy*, which in a *Hiſtory* of *Animals*, is certainly the moſt Neceſſary, moſt Significant, and Inſtructive Part. Nor can I ſee, how an *Hiſtory* of *Animals* can be well wrote without giving the *Diſſection* of the *Inward Parts*: 'Tis as if one ſhould undertake to deſcribe a *Watch*, and at the ſame time, take notice only of the *Caſe* or Cover, and tell what fine Garniture there is about it; but inform us nothing of the admirable Contrivances of the *Wheels* and *Springs within*, which gives it Life and Motion. *Galen* (41) thought the *Diſſection* of *Apes* very uſeful for the underſtanding the Structure of the *Parts* in *Humane Bodies*; and recommends it to his Scholars to Practice themſelves herein. Not that he only diſſected *Apes*, (as *Veſalius* oftentimes charges him with) or preferred it before the Diſſection of *Humane Body*: But where that could not be had, he adviſes them to get *Apes*, and diſſect them; eſpecially thoſe that come neareſt to a *Man*. Had he known our *Pygmie*, no doubt but he would have preferred it, for this purpoſe, as much beyond the *Ape*, as he does the *Ape* beyond the *Cynocephalus*, and all other *Animals*. For, as we ſhall obſerve, there is no *Animal*, I have hitherto met with, or heard of, that ſo exactly reſembles a *Man*, in the Structure of the *Inward Parts*, as our *Pygmie*: But where it differs, (as I have remark'd) there it reſembles an *Ape*; being different both from a *Man* and an *Ape*: And in many things agreeing with both of them.

The *Skin* of the whole Body of our *Pygmie* was whitiſh; but that on the *Head* was tawny, and of a darker colour. 'Twas thin, but ſtrong, and adhered pretty firmly, and more than uſually to the Fleſh; it's greateſt adhæſion was at the *Linea alba*, and in the *Palms* of the Hands, and the *Soles* of the Feet, and in the *Fingers* and *Toes*; as it is in *Men*. In the *Skin* of the *Arm-pits*, I obſerved thoſe *Glandulæ Cutaneæ Axillares*, which ſecrete that *Orange*-coloured *Liquor*, which in ſome Men ſtains the Shift here, with that colour. I call them *Cutaneæ*, to diſtinguiſh them from thoſe larger *Glands*, that lie bedded under in the Fat, and are call'd *Glandulæ Axillares*. For theſe I have obſerved to be *Lymphatic Glands*; and have traced the *Lymphaducts* thence to the head of the *Ductus Thoracicus*, where they empty themſelves.

(41) *De Anat. Adminiſtr. lib.* 1. *cap.* 2. p. m. 27.

Together with the *Skin*, we took off the *Mammæ* or *Breaſts*, which ſtuck cloſe to it: And in our Subject, being a *Male*, they were but ſmall and thin; yet I could plainly perceive they were made up of abundance of ſmall *Glands*. I have already mentioned, how large the *Breaſts* are in the *Female Orang-Outang*, and the *Baris*, ſo that no *Woman's* are larger. As to their *Situation*, and their being placed upon the *Pectoral Muſcles*, this I find is common to the *Ape-kind*: And they are ſo deſcribed by the *Pariſians* (42) in the *Monkeys* they diſſected; as alſo in the *Apes* diſſected by *Drelincourt*: (43) And becauſe I ſhall have frequent occaſion of referring to theſe Authors, unleſs I ſignifie otherwiſe, I ſhall always mean the Places here quoted, without mentioning them any more.

In *Brutes*, next under the *Skin*, lies a *Muſculous Membrane*, which therefore is call'd *Panniculus Carnoſus*, which gives a motion to it, whereby they can ſhove off what offends them. In *Man* 'tis otherwiſe; for next to the *Skin*, lies the *Membrana Adipoſa*; or the *Fat*, and under that, the *Membrana Carnoſa*: And the ſame I obſerved in our *Pygmie*; for the *Fat* here lay next to the *Skin*. *Drelincourt*, in the *Apes* he diſſected, obſerved the *Panniculus Carnoſus* next to the *Skin*, as 'tis in *Brutes*. For in the *Male Ape*, he tells us, *Adeps nullus inter Panniculum Carnoſum & Cutim*; and in the *Female*, *Panniculus Carnoſus cuti cohærens, nullo adipe interjecto, Adipoſus nullus*. So that in this Particular, our *Pygmie* is like to a *Man*, and different from the *Ape-kind*.

Having ſeparated the *Skin* and *Membrana Adipoſa*, which in our Subject was not very thick, it being emaciated by it's illneſs, we come now to the *Muſcles*. But I ſhall reſerve my ſelf to treat of them in the *Myology*. Next under the *Muſcles* was the *Peritonæum*, a Common Membrane, that lines all the inſide of the *Abdomen*, and ſends a common outward Membrane to all the *Viſcera* contained therein, and ſo ſecures their Situation. In this *Membrane* in *Quadrupeds* there is in the Groin of each ſide, a Perforation, or rather a *Proceſſus*, by which the *Seminal Veſſels* paſs down to the *Teſtes* in the *Scrotum*, as is very plain in *Dogs* and other *Animals*. But in *Man*, whoſe Poſture is *erect*, 'tis otherwiſe. For here theſe *Veſſels* paſs between the two *Coats*, that make up this *Membrane*, the *Peritonæum*; ſo that the *inward* Coat, that reſpects the Cavity of the *Abdomen*, is altogether entire, and continued, and 'tis only the *outward* Coat that is protruded into this *Proceſs*; and this for a very good Reaſon. For otherwiſe, a *Man*, whoſe Poſture is *erect*, would be conſtantly liable to an *Hernia*, or a *Rupture*; which happens when this *inward* Coat is protruded down likewiſe; and if there be a deſcent of the *Inteſtines*, 'tis then call'd *Entero-cele*: If of the *Omentum*, *Epiplocele*. In our *Pygmie* I obſerved the *Peritonæum*, in this reſpect, to be

(42) Memoirs for a Natural Hiſtory of Animals, *p.* 162, *&c. Engliſh* Tranſlation. (43) *Apud* Ger. Elſii, *Anat. Animal.* cap. 33. pag. 109, *&c.*

formed

formed exactly as 'tis in *Man*; and to be entire, and not protruded; as if *Nature* did design it to go *erect*. In *Apes* and *Monkeys* 'tis otherwise. So *Blasius* (44) observed in the *Ape* he dissected, *Processus Peritonæi* (saith he) *eodem modo hic se habet, ac in Cane. Datur & hic facilis via stylo ex ventre in Processum dictum inserendo.* And the *Parisians* have remarked the same in the *Monkeys* they dissected, which is a notable difference of our *Pygmie's* from the *Ape-kind*, and an agreement with the *Humane*. Hereafter, whenever I mention *Blasius*, unless I specifie otherwise, be pleased to take notice, that I refer to this Quotation.

The *Omentum* or *Caul* in our *Pygmie* was very thin and large, falling over and covering most parts of the Guts. 'Twas fastened a little to the *Peritonæum* in the Left Side. It had but little *Fat*, and was tinged in many places with a deep Yellow Colour, by the Bladder of the *Gall*, as was likewise part of the *Duodenum*. It had numerous Blood-Vessels, and it's adhæsion to the *Stomach*, *Colon*, and other Parts, as in *Man*. The Remarks the *Parisians* make upon the *Epiploon* or *Omentum* of the *Monkeys* they dissected, were different from our Subject. For they tell us, That *the* Epiploon *was different from that of a Man, in several things.* First, *It was not fastened to the* Colon *in so many places, having no connexion with the left part of this Intestine.* Ours I found was fastened just as 'tis in Man. Secondly, *It had another Ligature, which is not found in Man*, viz. *to the Muscles of the* Abdomen, *by means of the* Peritonæum, *which formed a Ligament; which we have observed in the* Hind *of* Canada. Ours adhered to the Left side: *Drelincourt* observed it in an *Ape*, to be fastened to the Right Side. Both I believe to be accidental, as I have frequently seen it in *Humane* Bodies. And in one *Patient* I found it fixt to the *Peritonæum* in the *Groin*, which gave him a great deal of Pain and Trouble, especially when his Bowels were any thing extended with Wind. Thirdly, *The* Parisians *say, The Vessels of the* Epiploon, *which in Man proceed only from the* Vena Porta, *did nevertheless in one of our Subjects come from the* Cava, *having there one of the Branches of the* Hypogastrica, *which was united to the Branches of the* Porta. In our *Animal* these Vessels came all from the *Porta*, or rather emptied themselves into it. But they observing it only in one Subject, and it being different in all other *Animals*, it must be accidental. Fourthly, *In fine, the whole* Epiploon *was without Comparison greater than it generally is in Man; because that it did not only cover all the Intestines, which is rarely seen in* Man, (*whatever* Galen *says*) *but it even enveloped them underneath, as it does in several other Brutes; where it is frequently seen, that the* Epiploon *is larger than in Man, especially in Animals that do run, and leap with a great deal of Agility: As if it were so redoubled, under the Intestines to defend them, with the rest of the Bowels, against the rude jolts which these Parts do*

(44) Ger. Blasii *Miscellan. Anat. Hominis Brutorumque variorum*, &c. in *Octavo*. p. m. 253.

receive in running. It is true, that the Membranes of the Epiploon *were entire and continued, as in* Man, *and not perforated like a Net, as they are in the generality of Brutes.* The *Epiploon* or *Caul* in our *Pygmie* was very large, yet I have ſeen the ſame frequently in *Humane Bodies*; but when they are diſeaſed, 'tis often leſs, and waſted; ſo that *Galen*'s Obſervation may be true. But methinks the Reaſon they give, why it ſhould be ſo large in Brutes, may be doubted of; for it being ſo tender a Part, it would be in danger, upon thoſe violent motions, of being broken, had not *Nature* made it looſe below, and free from any adhæſion; and it being ſo, it cannot perform the Office they aſſign it. *Drelincourt*'s Account of the *Epiploon*, as he obſerved it in the *Female Ape*, I like better. *Epiploon macrum* (ſaith he) *vaſis turgidis involvens Inteſtina omnia, uſque ad pubem, adhærens Extremo Hypochondrio dextro, quâ parte Colon ſubſtratum jecoris limbis. Idem adhæret ventriculi fundo & Colo, ut in homine.* And in the *Male Ape* he diſſected 'twas tinged yellow, as ours was.

We ſhall proceed now to the *Ductus Alimentalis*, at leaſt thoſe parts of it that are contain'd in the *Abdomen*, *viz.* the *Stomach* and *Inteſtines*; which I make to be the true *Characterisk* of an *Animal*, and a *Proprium quarto modo.* For all *Animals* have theſe Parts; and all that have them, are *Animals.* The *Senſes*, or ſome of them, are wanting in a great many *Animals*, and in ſome we perceive none but that *Univerſal one*, *Tactus*, yet here we find a *Ventricle* and *Inteſtines.* By theſe Parts 'tis, that the *Animal* Kingdom is principally diſtinguiſh'd both from the *Vegetable* and *Angelick. Vegetables*, 'tis true, receive conſtantly Nouriſhment, and without it, they periſh and decay; but 'tis in a far different manner; 'tis not received into ſuch an *Organick* Body, where the Food is prepared and digeſted, and ſo the *Nutritive* parts thereof diſpenſed afterwards into all the Body, and the reſt ejected, as *Excrementitious*; this is only to be met with in *Animals*, and in all of them. But yet I find there are intermediate *Species* of *Beings* between *Vegetables* and *Animals*, as the *Zoophyta:* the *Hiſtory* of which I could extreamly deſire might be given us; and can't but think that regularly in compiling a *Hiſtory* of *Animals*, one ſhould commence from them; and amongſt theſe, no doubt, but that there are ſeveral degrees of Perfection, till we come to what might be properly called an *Animal.* I have had no Opportunity of obſerving any of them, but only one; wherein I could perceive a ſenſible *Motion* and Contraction of ſome of the Parts, but could not diſtinguiſh any thing like the Structure of any of the Parts in an *Animal*, or the *Organs* that belong to them. An Accident diſappointed me of perfecting my Obſervations, otherwiſe I ſhould have communicated what I had diſcovered. But am ſenſible that there are great *Curioſities* here to be met with, if diligently enquired into; and that they might be, was the occaſion of this *Digreſſion.*

This

This *Canalis Alimentalis* therefore, or *Inductory Veſſel* (as I call it, for the Reaſons I have often mentioned in my *Anatomical Lectures* at *Chirurgeon's Hall*) is commonly diſtingiſhed into three Parts; The *Gula*, the *Ventricle*, and *Inteſtines*: The two latter do lie in the Cavity of the *Abdomen*, the former, in the *Thorax* and *Neck*; but being but one continued *Canalis*, I ſhall treat of the whole here.

The *Gula* or *Gullet*, by (45) *Tully* (in that excellent *Anatomical* Lecture he gives us, where he is proving a *Providence*) is call'd *Stomachus*. As 'tis alſo by *Celſus*, (46) ſo likewiſe in *A. Gellius*, (47) and frequently by *Hippocrates*. (48) And *Ariſtotle* (49) and *Galen* (50) expreſly tell us, that that Part between the *Fauces* and the *Ventricle*, which the Antients called *Oeſophagus*, after *Ariſtotle's* time, was wont to be call'd *Stomachus*, tho' now this word is more appropriated to the *Ventricle* it ſelf, which *Tully* in the ſame place calls *Alvus*. So true is that of *Horace*,

(51) *Ut Sylvæ foliis pronos mutantur in annos*
Prima cadunt: ita verborum vetus interit ætas.

However I ſhall follow *Horace's* Rule, ſince Cuſtom now hath appropriated the word *Stomach*, to the *Ventricle*, eſpecially our *Engliſh Tongue*, I ſhall do ſo too.

Multa renaſcentur, quæ jam cecidere: cadentque
Quæ nunc ſunt in honore vocabula: ſi volet uſus:
Quem penes arbitrium eſt, & vis & norma loquendi. (52)

This *Gula* or *Gullet* is a *Hollow Muſcle*, and fitly enough compared to a *Funnel*; where the *Mouth*, which may be thought a Part belonging to it, being more capacious, firſt receives the *Food*, and prepares it, by chewing, and then forces it down into this Stem or *Pipe*, to convey it to the *Ventricle*. I did not obſerve, upon the Diſſection, any difference of this Part in our *Pygmie*, from that of a *Man*. For as in a *Man*, (and ſo conformable too in other Circumſtances) it paſſed under the *lower Muſcle* of the *Diaphragm*, which by that ſlant running of it's fleſhy Fibres over it, may perform to it the Office of a *Valve*, and prevent the Regurgitation of the Food that way. Which may be the more neceſſary in our Subject, becauſe being uſed to climb Trees, and in coming down, to be *prono Capite*, it might be the more liable to this Accident. But for the better preventing this, I find here, that the Paſſage of the *Gula*, a little above where it empties it ſelf into the *Ventricle*, was ſtraiter, and

(45) M. T. Cicero *de Nat. Deorum*, lib. 2. §. 54. p. m. 427. (46) Cornel. Celſus, *de re Med.* lib. 4. cap. 1. (47) A. Gellij. *Noct. Attic.* lib. 17. cap. 11. (48) *Vid. Anut. Foſii Oeconom. Hipp. in verbo.* (49) Ariſt. *Hiſt. Anim.* lib. 1. cap. 10. §. 108. p. m. 89. & *paſſim alibi.* (50) Galen *de locis affectis.* lib. 5. cap. 5. p. m. 490. (51) Horace *de Arte Poetic.* verſ. 60. (52) Horace. *Ibid.* v. 70.

the

the inward Membrane here more rugous than in a Man; ſo that it ſeemed ſomewhat Analogous to a *Valve*. *Drelincourt* deſcribes it, in the *Female Ape* he diſſected, thus. *Oriſicium ejus ſuperius, nullâ Valvulâ clauſum; ſed interceptum duplici portione Diaphragmatis carnosâ, ab ejus tendinibus oriundâ.*

The *Ventricle* or *Stomach*, as we ſhall call this Part, in our *Pygmie*, as to it's Situation and Figure, exactly repreſented a *Humane Stomach*. When inflated, from the entrance of the *Gula* along the upper part to the *Pylorus*, it meaſured Two Inches and three quarters. Meaſuring with a Thread from the *Pylorus* along under the *Fundus*, up again to the entrance of the *Gula*, I found it to be Fifteen Inches; in all, near Eighteen Inches. The length of the *Stomach* in a ſtrait Line, was Six Inches and an half; and it's breadth in a ſtrait Line, where broadeſt, near Four Inches. The Girth of the *Stomach* in the middle, was near Twelve Inches. So that I thought the *Stomach* large, in Proportion to the bulk of the Body. It had numerous *Blood-Veſſels*, ſpreading themſelves all over, as in a *Man's*; and I could plainly perceive the Inoſculations of large Trunks of the *Coronary* Branches, with thoſe that deſcended from the upper Parts.

The *Pariſians* obſerved in their *Monkeys*, *That the Ventricle did likewiſe differ from a Man's, it's inferiour Orifice being very large and low; for it was not elevated ſo high as the ſuperiour, as it is in a Man.* I did not obſerve this in our *Pygmie*. So *Drelincourt* tells us in the *Female Ape*, *Ventriculus rugis interiùs nullis gaudet*; and ſome other Particulars he takes notice of. But there was nothing in ours, that I obſerved, different from a *Man's*.

As to their *Food*, I find it very different in the *Ape-kind*; as in part appears by what I have already mentioned of the *Ourang Outang*, the *Baris*, the *Pongo*, &c. So that I can't but think, (like a Man) that they are *omnivorous*. What chiefly our *Pygmie* affected, when *Wild*, I was not informed of; after it was taken, and made tame, it would readily eat any thing that was brought to the Table; and very orderly bring it's Plate thither, to receive what they would give him. Once it was made Drunk with *Punch*, (and they are fond enough of ſtrong Liquors) But it was obſerved, that after that time, it would never drink above one Cup, and refuſed the offer of more than what he found agreed with him. Thus we ſee *Inſtinct* of *Nature* teaches Brutes *Temperance*; and *Intemperance* is a Crime not only againſt the *Laws* of *Morality*, but of *Nature* too.

Jacobus

Jacobus Bontius (53) tells us, that the *Bezoar-ſtone* is bred in the Stomachs of *Apes*, as well as *Goats*, and he prefers it as the beſt. *Porrò vidi* (ſaith he) *& Lapides* Pa-zahar *natos in ventriculis Simiorum, qui teretes ſunt & longitudinem digiti aliquandò excedunt, qui præſtantiſſimi omnium cenſentur.* *Pa-zahar*, he tells us a little before, ſignifies in the *Perſian*, *contra venenum*, whence may come the word *Bezoar*. *Joh. Georg. Volchamerus* (45) takes notice of one he had from *Grimmius* out of the *Baboon*-kind, as big as a Wallnut. And in the *Scholium* on that Obſervation, *Joh. Bapt. Tavernier*'s (55) Travels are quoted, where he prefers two Grains of this, before ſix of the *Goat-Bezoar*. Tho' *Philip. Baldæus*, in his Deſcription of *Malabar* and *Cormandel*, does eſteem it much cheaper. *Caſper Bauhinus* hath wrote a diſtinct Treatiſe of the *Bezoar-ſtone*, to whom I refer my Reader; and ſhall only farther obſerve of it, that I think this *Medicine* ought not to be deſpiſed, becauſe in Health a Man may take a large Quantity of it, without any Injury; for I have evidently ſeen in the greateſt Weakneſſes, moſt Remarkable Effects from it, and have had Succeſs beyond expectation; it ſupporting the Spirits, and relieving them, where a more active Medicine might over-power them, and yet not have done that Service.

But this *Stone* in *Goats* and *Monkeys* is a Diſeaſe, and not Natural; as well as the Stone in the Bladder or Kidneys of a Man. *Bontius* (56) therefore obſerving the good Effects of the *Bezoar-ſtones* bred in theſe *Animals*, argues with himſelf, why thoſe in Men, which he finds laminated in the ſame manner, might not be of as great an Efficacy; and upon Tryal, he aſſures us, that they are ſo. *Hoc certè compertum habeo, Lapidem in veſicâ hominis repertum, urinam & ſudores probè ciere, quod tempore ingentis illius peſtis, quæ Anno* 1624 *&* 1625. *Leydam, Patriam meam & reliquas Hollandiæ Civitates, miſerandum in modum vaſtabat, in penuriâ Lapidis Baſaartici, nos exhibuiſſe memini, & Sudorificum* (*auſim dicere*) *melius & excellentius inveniſſe, cum admixtâ Theriacâ, aut Mithridatio, cum Oleo Succini aut Juniperi guttis aliquot.*

We come now to the Third Stage of the *Ductus Alimentalis*, the *Inteſtines*; which ſerve for the ſeparating the *Chyle* from the *Fæces*, and ſo tranſmitting it into the *Vaſa Chylifera*, or *Venæ Lacteæ*, as they are call'd, which conveys it into the *Blood*, for the recruiting the conſtant waſte that is made there, and repairing it's loſſes; as alſo for the Nouriſhment and Augmentation of the Parts: And for the doing this, 'tis requiſite that the *Inteſtines* ſhould be long; and they being ſo, that they ſhould be coyled and winding; that this *Separation* might be the better performed, and ſo we find the *Guts* in our *Pygmie*. For from the *Pylorus*

(53) Jac. Bontij, *Hiſt. Nat. & Med.* lib. 4. *in Animadv. in Garciæ ab Orto*, cap. 45. p. m. 48. (54) *Miſcell. Curioſa German. Decuriæ ſecundæ annus ſecundus An.* 1683. *Obſerv.* 189. p. 420. (55) Jo. Bapt. Tavern. *lib.* 2. Itin. Indic. *cap.* 24. (56) Bontius *ibid.* in cap. 46. p. m. 48.

to

to the *Anus*, they meaſured Thirteen Feet and three Inches, *viz.* from the *Pylorus* to the *Cæcum* or beginning of the *Colon*, was Nine Foot Ten Inches; and the *Colon* and *Rectum* were Three Feet and Five Inches long. The *Cæcum* here, or *Appendicula vermiformis*, was Four Inches and three quarters long. So that the length of the *Guts* here, in proportion to the length of the Body, is much the ſame as 'tis in a *Man*. But in two of the *Sapajous* diſſected by the *Pariſians*, the whole Inteſtines were but Five Foot two Inches; and in the other two *Monkeys*, Eight Foot long. So that herein our *Pygmie* more reſembles a *Man*, than their *Monkeys* did.

And as in the length, ſo likewiſe in other Circumſtances, the *Inteſtines* of our *Pygmie* were liker to thoſe of a *Man*, than thoſe of the *Monkey* and *Ape-kind* are. For the *Pariſians* tell us, that in their *Monkeys*, *the Inteſtines were almoſt all of the ſame bigneſs, and that the* Ileon *was in proportion a great deal bigger, than in a Man.* In our Subject we found a ſenſible difference. For the *ſmall Guts*, which were much of a bigneſs, being a little extended, meaſured in Compaſs about Two Inches and three quarters. The *Colon* was Three Inches and three quarters about; and the *Appendicula Vermiformis* (which was in our *Pygmie* as 'tis in a *Man*, and is not to be met with in *Apes* and *Monkeys*) was about the bigneſs of a Gooſe-quill. It's length I have mentioned before.

Into the *Duodenum* of our *Pygmie*, a little below the *Pylorus*, were inſerted the *Ductus Communis* of the *Gall*, and the *Ductus Pancreaticus*; they both emptying themſelves into the Gut at the ſame *Orifice* as is uſual in *Man*. And the ſame is obſerved likewiſe by *Drelincourt* in the *Male Ape* he diſſected, where he tells us, *à Pyloro qui videtur ſuggrunda eſſe circularis & carnoſa principio Ecphyſeos præpoſita, ad foramen uſque intra eandem Ecphyſin Commune Ductui Bilario & Wirzungiano, præciſe pollex eſt Mathematicus; ab illo autem foramine intra duplicem Ecphyſeos tunicam ſtilus gracillimus intruſus eſt in prædictam Veſiculæ felleæ recurvitatem, rurſuſque ab eodem Inteſtinali foramine idem ſtilus compulſus eſt in Ductum Wirzungianum.* But the *Pariſians* obſerved in the *Monkeys*, that *the Inſertion of the* Ductus Pancreaticus *into the Inteſtine*, (*which in Man is always near the* Porus Bilarius) *was Two Inches diſtant there-from.* So that in this Particular the *Monkey* does not ſo much reſemble a *Man*, as *Apes* and our *Pygmie* do.

The Convolutions and Windings of the *ſmall Guts* in our *Pygmie*, and their Situation, were much the ſame, as in a *Man*: And they were all plentifully irrigated with *Blood-Veſſels*. In the inward Coat of the *Inteſtines* I could obſerve the *Miliary Glands*, deſcribed by Dr. *Willis*; as alſo thoſe larger cluſters of *Glands*, mentioned by *Joh. Conrad. Peyerus*. The *Colon* I thought proportionably longer, than 'tis in a *Man*. It had the ſame *Ligaments* and *Cells*, and leaves of *Fat* hanging to it, as a Man's hath;

hath; and the ſituation, was the ſame: but it being ſo long, it had more windings than uſually. The *Pariſians* obſerved in their *Monkeys*, that the *Colon was not redoubled like an S. as in Man, being quite ſtrait.* *Drelincourt's Ape* was more like ours, for ſpeaking of the *Colon*, he ſaith, *retorquetur variè antequàm producat Rectum; cellulas habet ut in Homine.* For the length of the *Colon* in the *Monkeys* diſſected by the *Pariſians*, was but thirteen Inches; and an Inch in Diameter; whereas, the *Colon* of our *Pygmie* with the *Rectum*, was three Foot five Inches, as I have mentioned; and therefore liker to a Man's, and requiring theſe convolutions the more.

In a *Man* the *Inteſtines* are commonly diſtinguiſhed into *Inteſtina Tenuia* and *Craſſa*: The *Tenuia* are ſubdivided into the *Duodenum*, *Jejunum*, and *Ileon*; The *Craſſa*, into the *Cæcum*, *Colon* and *Rectum*: and the *Cæcum* commonly is reputed that *Appendicula Vermiformis*, which is placed at the beginning of the *Colon*, where the *Ileon* empties it ſelf into it. Now this Part in a *Man*, being ſo ſmall; and being obſerved never to contain any Excrement; I can't think, that it deſerves the Name of an *Inteſtine*, much leſs to be reputed one of the *Craſſa*. 'Tis true, in *Brutes*, this part is often found to be very large and capacious; and to be filled with *fæces*; and in ſuch, it may be juſtly eſteemed an *Inteſtine*. As in a *Rabit*, 'tis very long and hath a *Cochlear Valve*; ſo in an *Oſtridge*, there are two *Cæcums*; each a yard long, with a like *Valve*. But in *Man*, 'tis far different. Many therefore do not think this *Proceſſus Vermiformis*, to be the *Cæcum*; but rather take for is, that bunching out of the beginning of the *Colon*; which is projected beyond the entrance of the *Ileon*; which in the Common *Ape* and *Monkey* is more, than in a *Man*. However, I think it not enough, as to make it a diſtinct *Inteſtine*; and the number of the *Inteſtines* in a *Man*, ought to be made fewer.

Our *Pygmie* therefore having this *Proceſſus Vermiformis* in all Circumſtances, ſo like to that in a *Man*; and *Monkeys* and *Apes* having nothing like it: it is a remarkable difference of our Subject from them, and an agreement to the Structure of a *Humane* Body. So the *Pariſians* tell us in their *Monkeys*, *the Cæcum had no Vermiform Appendix.* So in the *Ape* diſſected by *Blaſius*, he ſaith, *Proceſſus Vermiformis in totum hic deſideratur.* And ſo *Drelincourt*, *Cæcum caret Epiphyſi Vermiformi, qualem homines habent.* We will ſee therefore, what kind of *Cæcum* 'tis, that they deſcribe in the *Monkeys* and *Apes*.

The *Pariſians* tell us, in the Diſſection of their *Monkeys*; That *the* Cæcum *was very large, containing two Inches and half in length; and an Inch Diameter at the beginning: it went pointing, and was fortified by three Ligaments, like as the* Colon *is in Man; there to form little Cells; this Conformation is wholly different from that of a Man's* Cæcum. 'Tis true, 'tis more projected, than in a Man; So *Blaſius* in his *Ape*, makes it jutting

out beyond the Inſertion of the *Ileon*, *Manûs tranſverſæ*, *ſeu trium digitorum ſpatium*. And *Drelincourt* tells us, *duarum unciarum eſt*. But ſince it hath thoſe *Ligaments* of the *Colon*, 'tis plain, that 'tis only a part of it, and not a diſtinct Inteſtine; or as *Blaſius* more truly calls it, *Principium Coli*. He hath given a *figure* of it, but not very exact; and in another *figure* he repreſents the *Valve* of the *Ileon* at the *Colon*, or rather *Valves*; for he makes more than one. His *Deſcription*, as 'tis faultily printed; ſo I am afraid, it is not very accurately drawn up, and therefore do omit it.

But what is different from *a Man*, as alſo from the *Ape* and *Monkey* too, or any other *Animal* I yet know of; is a ſort of *Valve* I obſerved at the other Extream of the *Colon* in our *Pygmie*, where it paſſes into the *Rectum*. For the turn of the *Colon* here, is very ſhort; and in the inſide I obſerved a Membranous Extenſion like a *Valve*, an Inch in length, which divided the Cavity half way. The *Rectum* did not much differ from the *Colon* in the magnitude of it's *fiſtula*, but was much the ſame; and in other reſpects, as 'tis in a *Man*.

This great length of the *Inteſtines* in our *Pygmie* was orderly colligated and faſtened to the *Meſenterie*, which kept them in a due ſituation; and ſo, as to make in them, ſeveral windings or convolutions; that hereby they might the better make a diſtribution of the *Chyle*; and the whole was, as 'tis in a Man. But I obſerved here, the *Membranes* of the *Meſenterie*, to be more looſly joyned together, than uſually. For by moving them by my fingers, I found the *blood veſſels* which were faſtened to the *upper Membrane*, would eaſily ſhove over thoſe, that were fixt in the *under Membrane* of the *Meſenterie*; and run on either ſide of one another, as I would draw them. I have ſometimes ſeen the ſame in *Humane Bodies*.

The *Meſaraic Veſſels* here, were very numerous; as they approach the *Inteſtines*, they form ſeveral *Arches*, whereby they communicate with one another; and from theſe *Arches*, they ſend out numerous Branches to the *Inteſtines* of each ſide, which run claſping them; afterwards they ſubdivide, and inoſculate with one another in infinite *Ramuli*: ſo that by injecting theſe *Veſſels* with *Mercury*, they appeared ſo numerous; as almoſt wholly to cover the Trunk of the *Inteſtines*. And the ſame is in *Man*.

I have likewiſe ſeen, by injecting the *Meſenterick Veſſels*; that the *Mercury* has paſſed into the *Lymphæducts*; and ſo into the *Venæ* or *Vaſa Lactea*. Which is a great contrivance of *Nature*. For the *Motion* of all *fluids* being *Pulſon*, without this advantage, part of the *Chyle*, muſt neceſſarily ſtagnate in ſome of the Veſſels; till a freſh diſtribution of *Chyle* comes; to protrude it on; and ſo it would be apt to coagulate and cauſe

cauſe Obſtructions. But by the *Lympha* thus paſſing into them; the *Chyle* is ſtill forced forwards, and the *Veſſels* waſhed clean of it; and being thus often moiſtened, they are preſerved from becoming over dry, or cloſed or obſtructed. So Provident therefore is *Nature*, that in the whole *Via lactea*, not only in the *Meſenterie*; but into the *Receptaculum Chyli*, and *Ductus Thoracicus* likewiſe; abundance of *Lymphæducts* are emptied. Which gives us one good Reaſon; that *Nature* does not act in vain, in making ſuch a ſeparation of a Liquor from the Maſs of Blood; which is ſo ſoon to be return'd to it again; ſince hereby ſhe performs ſo great an Office.

In the *Meſenterie* of our *Pygmie* I obſerved ſeveral ſmall *Glands* ſcattered up and down, as in a *Man*; but not ſo regularly amaſſed together in the middle; as the *Pancreas Aſellij* is in *Brutes*. And *Drelincourt* obſerved much the ſame in the *Male Ape*. *Glandulæ ad radicem Meſenterij, & paſſim in ambitu, numeroſæ & planæ, magnitudinem Lentulæ, ſed Ovales. Anaſtomoſes frequentiſſimæ Venarum cum Venis & Arteriarum cum Arteriis in univerſo Meſenterij circulo.* And as that part of the *Meſenterie* which faſtens the *Colon* is call'd *Meſocolon*; ſo for the ſame reaſon, that ſlip of it repreſented in our figure, that runs down to the *Proceſſus vermiformis*, may be call'd the *Meſo-cæcum*.

We ſhall next proceed to the *Liver*, in which part our *Pygmie* very remarkably imitated a *Man*, more than our common *Monkeys* or *Apes* do. For the *Liver* here was not divided into *Lobes* as it is in *Brutes*; but intire as it is in a *Man*. It had the ſame ſhape; it's ſituation in the body was the ſame; and it's Colour, and Ligaments, the ſame. It meaſured in it's greateſt length about five Inches and an half; where broadeſt, 'twas about three Inches; and about an Inch and three quarters in thickneſs. Towards the *Diaphragm* 'twas *convex*: it's under part was *Concave*, where it receives and emits the Veſſels, having a little *Lobe* here, as 'tis in a *Man*.

The *Pariſians* remark in the *Monkeys* they diſſected, that *the Liver was very different from the Liver of a Man, having five Lobes as in a Dog*; viz. *two on the right ſide*; *and two on the left*; *and a fifth laid upon the right part of the body of the Vertebræ. This laſt was divided, making as it were two leaves.* So *Drelincourt* in the *Male Ape* obſerves, *Jecoris Lobi duo juxta umbilicalem venam, quorum ſecundo incuneata erat veſicula fellis, duo alij ventriculum amplectebantur, cum lobulo quinto ſe inſerente in ſpatium ventriculi intra orificium utrumque.* So likewiſe in the *Female Ape* he tells us, *Jecur opplet regionem Epigaſtricam quintuplici lobo, uno ſexto minimo opplens cavitatem lunarem ventriculi.* But *Blaſius* in the *Ape* he diſſected ſaith, *Epar cum humano minimè, optimè cum Canino convenit, manifeſtiſſimè in lobos VII diviſum, tantæ magnitudinis ut etiam utrumque Hypochon-*

drium occupet. *Veſalius* (57) therefore is in the right, where he ſaith, *Quæ enim Diſſectionum Profeſſores de Jecoris formâ, ac penulis ſeu fibris (quos λοβοὺς Græci vocant) commentantur; è Canum potiùs, & ſimiarum ſectionibus, quàm hominum didicerunt. Humanum enim Jecur in fibras, Porcini, ac multò adhuc minùs Canini Jecoris modo, non diſcinditur.* And that he hints here at *Galen*, is plain, from what he expreſſes in his Epiſtle *ad Joachim Roelants*, (58) where he farther enlarges upon it. And *Galen* (59) himſelf tells us, that *Herophilus* was of this Opinion. So *Theophilus Protoſpatarius* (60) ſaith, that the *Liver* is divided into four *Lobes*; and gives us there a diſtinct Name for each. *Ariſtotle*, (61) 'tis certain, was much more in the right, where he ſaith, στρογγύλον δ' ἔχει τὸ τῦ ἀνθρώπου ἧπαρ, καὶ ὅμοιον τῷ βοείῳ. *Rotundum Jecur hominis eſt, ac ſimile bubulo.* For the Liver of a Bullock, like a Man's is entire; and not divided into *Lobes*. However *Franciſcus Puteus* (62) in his *Apology*, having named ſeveral Phyſicians and Chirurgians, that were with him at the opening of *Charles* the Ninth, Duke of *Savoy*, ſaith, *hi omnes per Jovem mihi poſſunt eſſe Teſtes, quod obſervatum eſt Epar habuiſſe quatuor pinnulas. Jacobus Sylvius* (63) likewiſe juſtifies *Galen*, againſt *Veſalius*; and tells us, *Quin & Hippocrates Lobos Epatis humani quinque connumerat libro ſuo de oſſibus. Rufus autem quatuor vel quinque.* But *Renatus Henerus* (64) hath anſwered *Sylvius* as to this matter; and there needs no farther diſpute about it, if one will but believe his own Eyes, he may fully ſatisfie himſelf, that, in an *Humane Liver* there are none of thoſe *Lobes*, but that 'tis one entire Body; as it was alſo in our *Pygmie*. But in *Apes* and *Monkeys* the *Liver* is divided into *Lobes*.

The great *uſe* of the *Liver* is for to make a ſeparation of the *Gall* from the Maſs of Blood. We will therefore here examine the *Biliary Veſſels*; nor do I find them any thing different from thoſe in a *Man*; only the *Bladder* of *Gall* here in our *Pygmie* ſeemed longer, being four Inches in length. It's adhæſion to the *Liver* was not ſo much as it is in a *Man*; for at the *fundus* or end, it juts beyond the *Liver* about half an Inch. For about three quarters of an Inch, it is more cloſely joyned to the *Liver*; afterwards it is faſtened to it only by a Membrane, as is alſo the *Ductus Cyſticus*. So that the *Veſica fellea* when inflated with wind, ſeemed more to repreſent an *Inteſtine* by it's *anfractus* and length, than the uſual ſhape of the *Bladder of Gall*; which commonly is more bellying out.

The *Pariſians* obſerved in their *Monkeys*, that the *Bladder was faſtened to the firſt of the two Lobes which were on the right ſide. That it was an Inch long, and*

(57) *Veſalij de fabricâ corporis humani*, lib. 5. cap. 7. p.m.619. (58) *Andr. Veſalij Epiſtola*, &c. p.m.81. (59) *Galen. de Anat. Adminiſtrat.* lib.6.cap.8. (60) *Theophilus de Corporis humani fabrica*, lib. 2. cap. 2. (61) *Ariſt. Hiſt. Animal.* lib. 1. cap. 17. p. m. 595. (62) *Franc. Putei Apologia pro Galeno in Anatomicis contra Andr. Veſalium*, lib. 5. p. m. 153. (63) *Vaſani cujuſdam Calumniarum in Hipp. Galenique rem Anat. detuſin. per Jac. Sylvium.* vid. Depulſ. 26. p. m. 150. (64) *Renat. Henerus adverſus Jacobi Sylvij Depulſionum Anat. Calumnias pro Andrea Veſalio Apologia*, p.m. 55.

half

half an inch broad; it had a great Ductus, *which was immediately inſerted underneath the* Pylorus. *This* Ductus *received three others, which inſtead of that, which in Man is ſingle, and which is called* Hepaticus; *theſe three* Ductus's *had their Branches diſperſed like Roots into all the Lobes of the Liver, ſo that the firſt had four roots*, viz. *one in each of the three right Lobes, and one in the firſt of the left; the ſecond and third* Ductus *had both their roots in the ſecond of the left Lobes, theſe branches did not run under the Tunicle of the Liver, ſo that they were apparent, and not hid in the* Parenchyma, *as they generally are.* But in our Subject the diſtribution of the *Ductus Hepaticus* was altogether the ſame as it is in *Man*. In the *Male Ape*, *Drelincourt* deſcribing the *Bladder* of *Gall*, ſaith, *Veſicula fellea longa 2½ pollicibus à fundo ad cervicem, ubi recurvitatem habet maximam, dimidiatè hæret merſa ſubſtantiæ Jecoris.*

The *Ductus Hepaticus* in our *Pygmie* iſſued out of the Liver with two branches; one ariſing from the right, the other from the left part of the Liver; and after a ſhort ſpace, joined into one Trunk; and that, after a little way, joyning with the *Ductus Cyſticus*, do form the *Ductus Communis*, which empties it ſelf into the *Duodenum* a little below the *Pylorus*, at the ſame Orifice with the *Ductus Pancreaticus*, exactly as 'tis in *Man*, as I have mentioned.

At the *Simous* part of the Liver I obſerved the *Vena Porta* to enter, as likewiſe the *Epatic Arteries* and *Nerves*. And here in the Membrane about theſe Veſſels, I obſerved a pretty large whitiſh *Gland*. The *Vena Umbilicalis* entered the *Liver* at the *fiſſure*. It ſeemed large, but I found it's *fiſtula* or pipe was cloſed. The *Vena Cava* iſſued out of the *Liver* at the *Convex* part, where 'twas joyned to the *Diaphragm*.

In the *Spleen* of our *Pygmie* I did not obſerve any thing extraordinary, or different from a *Humane Spleen*. It was of a lead Colour, and of the ſhape repreſented in our *figure*; 'twas faſtened by Membranes to the *Peritonæum*; and by the *Omentum* and *Vaſa brevia* to the *Stomach*, ſo that upon inflating the Stomach, the Spleen would be brought to lye cloſe on the Stomach, as if it was faſtened immediately there. The *Spleen* here was two Inches and an half long; and one Inch and a quarter broad; and ſeated as uſually in the *left Hypochondre* under the *Baſtard Ribs*. The *Ramus Splenicus* was very remarkable, ſending it's Trunk along the *Pancreas*, as in *Man*, and having numerous branches near the *Spleen*.

The *Pariſians* tell us, that in their *Monkeys the Spleen was ſeated along the Ventricle as in Man; but it's figure was different, in one of our Subjects being made as the Heart is repreſented in Blazonry; it's* Baſis *containing an Inch.* They give a *figure* of it, but nothing like that of ours, which more repreſented the figure of an *Humane Spleen*; tho' in *Man* it's *figure* is often obſerved very different. *Blaſius* in the *Ape* he diſſected, obſerves that

that the Spleen *triangularis figuræ eſt, exiguus admodùm reſpectu corporis, coloris nigricantis, læve equidem molleque valdè corpus, aſt exteriùs inæquale, quaſi ex globulis variis confectum, adeò ut etiam conglomeratis Glandulis Subſtantiam Lienis annumerare velle, tali in ſubjecto fundamentum aliquod agnoſcat. Ex Ramo Splenico numeroſos coſque inſignes Ventriculo ſuppeditat ramos, magnitudinem & figuram externam Fig. 3ª. Tab. XI. exhibet.* But his *figure* of the *Spleen* was nothing like to that of ours. For I did not obſerve thoſe inequalities in the *ſuperfice* which he repreſents in his, to exhibit the *conglomerate Glands*. 'Tis true, having injected the Spleen of our *Pygmie*, the *Mercury* filling the *cellulated* body of the *Spleen*, did make an appearance on the ſurface ſomewhat like thoſe inequalities in his *figure*. But *Frederic. de Ruſch* (65) is very poſitive, that neither thoſe *Glands*, nor *Cells* mentioned by *Malpighius*, are to be met with in a *Humane Spleen*: tho' he grants, that they are in the *Spleen* of *Brutes*. *Drelincourt* in the *Female Ape* ſaith, *Lien Scalenum figura refert, cohæret Reni ſiniſtro & liber eſt à Diaphragmate.* And in the *Male Ape* he obſerves, *Lien triangularis & craſſior quàm in fœminâ, Pancreas excipiens.*

We ſhall therefore now proceed to the *Pancreas*, which in our *Pygmie* was ſituated, juſt as it is in a *Humane Body*; lying under the *Stomach*, tranſverſe to the Spine, from the *Spleen* towards the *Liver*. It was about two Inches long, about half an Inch broad, of a white yellowiſh Colour; it's ſurface uneven, being made up of abundance of *Glands*; it's *Secretory Duct* emptied it ſelf into the *Duodenum*, juſt where the *Ductus Communis* of the *Gall* doth, as I have mentioned before.

The *Pariſians* in their *Monkeys* obſerved, that *the* Pancreas *had only it's figure, which made it to reſemble that of Man; it's connection, and inſertion being wholly particular. For it was ſtrongly faſtened to the Spleen; and the inſertion of it's* Ductus *into the Inteſtine (which in Man is always near the* Porus Bilarius) *was two Inches diſtant therefrom. Blaſius* in his *Ape* deſcribes it thus; *Pancreas ventriculo ſubſtratum, ſolidæ admodùm ſubſtantiæ eſt, nec adeò molle, quàm in Canibus aliiſque Animalibus notatur. Longum itidem inſigniter, aſt latitudinis ejus, quæ nè minimi digiti latitudini reſpondeat.* He takes no notice here, how the *Ductus Pancreaticus* was inſerted; which *Drelincourt* tells us in the *Female Ape* was eight lines above the *Porus Bilarius*. *Pancreas connatum Lienali Caudæ, & extremo Reni ſiniſtro. Ejus ductus inſcritur octo lineis ſupra Porum Bilarium, contrà ac Canibus, ſubſternitur immediatè Ventriculo, & ſuperſternitur brevi Inteſtino.* Tho' in the *Male Ape* he tells us, 'tis inſerted into the *Duodenum* at the ſame Orifice with the *Duct* of the *Gall*, as I have already mentioned and quoted before.

(65) *Epiſtola Anatomica Problematica quarta.*

The

The *Glandulæ Renales* in our *Pygmie* were very large, and placed a little above the *Kidnies* as they are in *Man*. That on the right ſide, was of a triangular; that on the left of an oblong figure. They were about three quarters of an Inch long: and almoſt half an Inch broad. They had the ſame Veſſels, as there are in a Man.

The *Pariſians* in their *Monkeys*, obſerve that the *Gland called* Capſula Atrabilaria, *was very viſible, by reaſon that the Kidney was without fat. This Gland was white, and the Kidney of a bright red; it's figure was triangular. Blaſius* in his *Ape* tells us, *Glandula Renalis triangularis ferè figuræ eſt, notabilis valdè pro ratione Corporis*, and gives us a *figure* of it, which was nothing like ours. What *Drelincourt* remarks in the *Male Ape*, is, *Capſulæ Atrabilariæ triplicem Scrobiculum habent, quarum liquor expreſſus linguam non ità conſtringit, uti in Capſulis fœmineis.* And in the *Female Ape* he tells us, *Ren Succentariatus ſiniſter ab Emulgente venam habet; idem major Dextro.* This I obſerved in our *Pygmie*; but he ſaith nothing farther here of their *Liquor*, nor did I taſte it in ours.

We ſhall now proceed to the *Kidneys*. In our *Pygmie* I did obſerve very little or no fat in the *common* or outward *Membrane*, uſually called *Adipoſa: Drelincourt* obſerved the ſame, *nullus hic Adeps in Tunicâ communi vel propriâ*, as he tells us of his *Ape*. The *Kidneys* of our *Pygmie* were two Inches and a quarter long, an Inch and an half broad; and about an Inch in depth. They had not altogether ſo large a *Sinus* at the Entrance of the *Emulgent* Veſſels, as there is in a Man's; and the whole appeared ſomewhat rounder; but their ſituation was the ſame, as were likewiſe the *Emulgents*. Having divided the right *Kidney* length-ways, I obſerved the *Cortical* or *Glandulous* Part to appear like a diſtinct Subſtance, being a of tawny or yellowiſh colour; and different from the *Inward* or *Tubulary Part*; which was more entire and compacted together, than in a *Man's*; and was of a red colour, by means of the *blood veſſels* which run between the *Tubuli Urinarij* or *Secretory Ducts*, which make up this part of the *Kidneys*. Which Veſſels when inflamed and over-extended, by making a Compreſſion on theſe *Tubuli Urinarij*, may cauſe a *Suppreſſion* of Urine; in which caſe *Phlebotomy* or *Bleeding* is very neceſſary. And without doubt was the Cauſe of the Succeſs *Riverius* (66) met with in a Patient, who had a *Suppreſſion* of Urine for three days; for upon bleeding freely, he was preſently relieved, and in a ſhort time rendered a large quantity of Urine. In this *Tubulary* Part of a Humane *Kidney* I always obſerve theſe *Blood Veſſels:* but here uſually the *Cortical* or *Glandulous* Part makes a deeper deſcent between the heads of this *Tubulary*, and divides it into ſeveral Bodies; and as many of them as appear, ſo many leſſer *Kidneys* may be reckoned to make up the Body of each *Kidney*. In *Infants* the *Kidney* externally appears more divided

(66) *Riverij Obſerv. Med. Cent.* 1. *Obſ.* 1.

than

than in *Adult* Perſons; but moſt remarkably they are ſo, in a *Bear*, the *Porpois* and an *Oſtrich*; where there are abundance of diſtinct *ſmall Kidneys* amaſſed together to make up each.

The *Pariſians* in the *Kidneys* of their *Monkeys* obſerve, *that they were round and flat; their ſituation was more unequal, than in a Man; the right being much lower than the left*, viz. *half it's bigneſs*. *Drelincourt* in the *Female Ape* remarks, *Renes globoſi, dexter intra Hypochondrium incumbit Coſtæ* 11. *&* 12. *Siniſter locum habet intra Coſtam ultimam. Altitudo Renis dimidiæ unciæ. Renalium venarum dextra longè elatior ſiniſtrâ. Rene aperto Carnis diſcrimen ut in homine, exterior quidem nigricans lineis quatuor craſſa, interior albicans lineis duabus.*

The *Pelvis* of the *Kidney* in our *Pygmie* was as 'tis uſually in a *Man*; and the *Ureters* had nothing remarkably different in their Structure, from the common make. They were about the bigneſs of a Wheat ſtraw; and were inſerted into the neck of the *Bladder*, as repreſented in our *figure*; rather ſomewhat nearer the neck, than in an *Humane Bladder*.

The *Pariſians* and *Blaſius* have no remarks upon the *Ureters*. *Drelincourt* in the *Male Ape* ſaith, *Ureteres ſuprà Pſoas Muſculo & Iliaco, atque ſubtùs vaſis Spermaticis, quibus decuſſatim ſubſtrati ſunt etiam quibus vaſcula admittunt, ſeſe reflectunt in Hypogaſtricam, decuſſantes ramos Iliacos & Ejaculatorios.* And in the *Female*, *Ureteris expanſiones arcuatim reflexæ ut in homine. Vaſa habent ſuperne à Renalibus, infernè à Muſculis.*

The *Bladder* of *Urine* in our *Pygmie* was of an Oblong figure, not ſo globous as commonly in *Man*, for being moderately blown up it meaſured four Inches in length; and two Inches and half in breadth. In other Circumſtances 'twas agreeable enough with an *Humane Bladder*.

The *Pariſians* tell us, that in the *Female Monkey*, *the Neck of the Bladder had it's hole otherwiſe than in Women, being very far in the Neck of the* Matrix, viz. *towards the middle, at the place where it's roughneſs began, which were ſeen only towards the Extremity of the* Ductus, *near the internal Orifice*. *Blaſius* ſaith nothing of it in his *Ape*; and all that *Drelincourt* tells us is, *Veſica Peritonæo ſuſpenſa ut in aliis Brutis.*

Before we proceed to the Parts of Generation (which remain beſides to be here deſcribed) we ſhall a little take notice of thoſe large *Canales* of the *Blood*, the *Arteria Aorta* and the *Vena Cava*, and the *Rivulets* they emit or do receive; all which I find in our *Pygmie* to be juſt the ſame, as they are in a *Man*. For from the *Aorta* ariſes here, the *Arteria Cæliaca*; the *Arteria Meſenterica ſuperior*; then the *Emulgent Arteries*; below them, the *Spermatick Arteries*; then the *Arteria Meſenterica inferior*; then the

Trunk

Trunk divides into the *Iliac Branches*. So the *Vena Cava* too in our *Pygmie* exactly imitated that in a *Man*.

How the Structure of these *Vessels* are in *Monkeys*, the *Parisians* do not tell us, and their *figure* is very imperfect; as is likewise that in *Blasius*, which seems altogether fictitious. What he writes, is this; *Arteria magna circa Renem dextrum succumbit Venæ Cavæ, & ubi Iliacos Ramos constituit eandem supergreditur; contrà ac in Homine, Cane, aliisque animalibus fieri reperimus, ubi sinistra occupat, hinc à sinistra ad dextram progreditur supra Arteriam.* So *Drelincourt* tells us in the *Male Ape*, *Aorta descendens mox atque bifurcatur equitat, & adscendenti Cavæ incumbit.*

We come now to the *Parts* of *Generation*; and shall begin with the *Vasa Præparantia*; The *Arteries* and *Veins*. The *Spermatic Arteries* in our *Pygmie* do both arise out of the Trunk of the *Aorta*, a little below the *Emulgent Arteries*, as in our *figure*; and after having ran a little way, they meet with the *Spermatic Vein*; and are both included in a common *Capsula*, and so do descend to the *Testes*. These *Arteries* do carry the *blood* to the *Testes*, from whence the *Semen* is afterwards separated; the residue of the *Blood* is return'd from the *Testes* by the *Spermatic Veins*; whereof that on the right side enters into the Trunk of the *Vena Cava*, a little below the right *Emulgent Vein*; and that of the left, is emptied into the left *Emulgent Vein*, just all one as it is in a *Humane Body*. Having injected the *Spermatic Vein* with *Mercury*, it discovered abundance of Vessels, running waving; which otherwise did not appear: and a great many of them were extreamly fine and small.

The *Parisians* give no description of the *Spermatic Vessels* in their *Monkeys*; and in their *figure* the left *Spermatic Vein* is omitted, or left out. *Thomas Bartholine* (67) in his *Anatomy* of a *Mamomet* (which he describes, as not having a Tail; and therefore it must be of the *Ape*-kind, and not a *Cercopithecus*, or a *Monkey*, as he calls it) in his figure of these parts, represents the left *Spermatic Vein*, emptying it self into the left *Emulgent*, as it is in our Creature. *Blasius* therefore in the account of the *Ape* he dissected, must be mistaken; both in his *figure* and *description* too; for in the former, he represents the *left Spermatic Vein* running into the Trunk of the *Cava*; and justifies it in the latter; in telling us, *Vasa Spermatica utroque latere ex Trunco Cavæ & Aortæ oriuntur, & quidem altiori loco ea quæ sunt lateris dextri, inferiore quæ sinistri.* But *Drelincourt* certainly is more in the right, who informs us, that in the *Male Ape* he dissected, *Vena Spermatica dextra crassa, & ab interiori trunco Cavæ adscendentis pollice infra Emulgentem sinistram enascitur, furculosque emittit sinistros in Membranas vicinas. Arteria Spermatica dextra à trunco anteriori*

(67) *Thom. Bartholin. Acta Medica & Philos. Hafniens. an.* 1691. *&* 1672. *Obs.* 36.

Aortæ paulò infra Emulgentem ſiniſtram enaſcens ſub Venâ Emulgente intercruciat Cavam aſcendentem, quæ ſuperinequitat, & conjungitur Venæ Conſociali eò præcisè loci ubi Vena inſeritur ſuum in truncum. Siniſtra Vena Spermatica inſeriturin Emulgentem juxta truncum Cavæ, & conſocialem Arteriam admittit eò præcisè loci, in quo enaſcitur dextra. So in the *Female Ape* he ſaith, *Spermatica Vena ſiniſtra ab Emulgente ſiniſtrâ, dextra è Trunci parte anteriore, pollice infra Emulgentem ſiniſtram.*

We come now to deſcribe the *Teſtes*, which in our *Pygmie* were not contained in a *pendulous Scrotum*, as they are in *Man*, but more contracted and purſed up by the outward Skin, nearer to the *Os Pubis*, and were ſeated by the ſides of the *Penis*, without the *Os Pubis*; and I obſerved them bunching out there, before the Diſſection; ſo that it ſeemed to want a *Scrotum*; or at leaſt the Skin which incloſed them, was not ſo dilated, as to hang down like a *Cod*; but contracted them up nearer to the Body of the *Penis*; which to me ſeems a wiſe Contrivance of *Nature*. For hereby theſe Parts are leſs expoſed to the injuries, they might otherwiſe receive in climbing Trees, or other accidents in the Woods. However, the outward Skin here that incloſes them, performs altogether the office of a *Scrotum*. And if I miſtake not, I obſerved that *Sepimentum*, as in a *Humane Scrotum*; which is made by a deſcent of a *Membrane* there, which divides each *Teſticle* from one another.

But whether the *Teſtes* being thus cloſely purſed up to the Body, might contribute to that great *ſalaciouſneſs* this *Species* of *Animals* are noted for, I will not determine: Tho' 'tis ſaid, that theſe *Animals*, that have their *Teſticles* contained within the Body, are more inclined to it, than others. That the whole *Ape*-kind is extreamly given to *Venery*, appears by infinite Stories related of them. And not only ſo, but different from other *Brutes*, they covet not only their *own Species*, but to an Exceſs are inclined and ſollicitous to thoſe of a *different*, and are moſt *amorous* of fair *Women*. Beſides what I have already mentioned, *Gabriel Clauderus* (68) tells us of an *Ape*, which grew ſo amorous of one of the *Maids* of *Honour*, who was a celebrated Beauty, that no Chains, nor Confinement, nor Beating, could keep him within Bounds; ſo that the *Lady* was forced to petition to have him baniſhed the Court. But that Story of *Caſtanenda* in his *Annals* of *Portugal* (if true) is very remarkable; of a Woman who had two Children by an *Ape*. I ſhall give it in *Latin*, as 'tis related by *Licetus*; and 'tis quoted too by *Anton. Deuſingius* (69) and others.

In hanc Sententiam faciunt (*ſaith* Fort. Licetus (70)) *quæ Caſtanenda retulit in Annalibus* Luſitaniæ *de filiis ex muliere, ac ſimio natis, mulierem*

(68) *Miſcell. Curioſa German. Decur.* 2. *Ann.* 5. *Obſ.* 187. (69) *Ant. Deuſingij Faſſicul. Diſſertat. ſelect. de Ratione & Loquela Brutorum*, p. m. 196. (70) *Fortun. Licetus de Monſtrorum Cauſis*, lib. 2. cap. 68. p. m. 217.

nempe

nempe ob quoddam crimen in inſulam deſertam navi deportatam, quum ibi expoſita fuiſſet, eam ſimiorum, quibus fertilis locus erat, agmen circumſtetiſſe fremebundum; ſupervenisſe unum grandiorem, cui reliqui loco cesserint: hunc mulierem blandè manu captam in antrum ingens abduxiſſe, eique cum ipſum tum ceteros copiam pomorum, nucum, radicumque variarum appoſuiſſe; & nutu ut veſceretur invitâſſe; tandem à ferâ coactam ad ſtuprum; facinus hoc multis diebus continuatum adeò, ut duos ex ferâ liberos pepererit: ita miſeram (quantò mors optabilior!) victitâſſe per annos aliquot; donec Deus miſertus navim eò Luſitanam *detuliſſet; quumque milites in terram aquatum ex proximo ad antrum fonte exſcendiſſent: abeſſetque fortè fortuna ſimius; feminam ad inviſos diu mortales accurriſſe, & occidentem ad pedes ſupplicâſſe, uti ſe facinore, & calamitoſiſſima ſervitute irent ereptum, adſentientibuſque, & caſum miſerantibus illis, eam cum ipſis navim adſcendiſſe. Sed ecce tibi ſimium ſupervenientem inconditis geſtibus, & fremitibus conjugem non conjugem revocantem: ut vidit vela ventis data, concito curſu de liberis unum matri oſtentat, minatur, ni redeat, in mare præcipitaturum; nec ſegniter fecit, quod minatus: tum recurrit ad antrum, & eâdem velocitate ad littus rediens oſtentat alterum, minatur, & demergit: ſubſequitur, donec undæ natantem vicere. Rem totam* Luſitania *teſte notiſſimam, & à Rege mulierem* Ulyſſipone *addictam ignibus, quorundam precibus vita impetrata, lethum cum clauſtro perpetuo commutâſſe.*

But to return to our Buſineſs. Our *Pygmie* in this Particular of the *Scrotum*, more reſembles the *Ape*-kind, than a *Man*. For the *Pariſians* tell us, that *the Parts of Generation in three of our Subjects, which were Males, were different from thoſe of Man, there being no* Scrotum *in two of theſe Subjects, and the Teſticles not appearing, by reaſon that they were hid in the fold of the Groyne. It is true that the third, which was one of the* Sapajous, *had a* Scrotum, *but it was ſo ſhrunk, that it did not appear.* Or, as they afterwards expreſs it, *The Teſticles were ſhut up in a* Scrotum, *which joyned them cloſe up to the* Penis. So in the *Ape Blaſius* deſcribes, *Teſtes inſignes ſatis, ſacculo ſuo incluſi, non dependent extra abdomen, ad modum eum quo in Homine, Canibus, ſimilibuſque Animalibus aliis, ſed vicini adeò ſunt tendinibus muſculorum Abdominis, quos vaſa Spermatica tranſeunt, ac ſi iis uniti eſſent, ſic ut potiùs in Inguine utroque collocatos eos dicerem, quàm ultra oſſa Pubis a Corpore pendulos.* And ſo *Drelincourt* to the ſame purpoſe; *Scrotum pendulum nullum eſt, ſeſt Teſticuli utrinque juxta Oſſis Pubis ſumma latera, vel Spinam ſummam ejus decumbunt extra prorſus Abdominis cavum, & proindè extra Muſculorum Epigaſtrij Aponeuroſes.*

In the other Parts I am here to deſcribe, I find our *Pygmie* more conformable to the Structure of the ſame in a *Man*. For the *Teſtes* were included in a *Tunica Vaginalis*, and had a *Cremaſter Muſcle*; which being ſeparated, I obſerved the *Epididymis* large, and the Body of the *Teſtis* to be about the bigneſs of a *Filbird*; and it's compounding Parts nothing at all different from thoſe of a *Man*. *Jacobus Syl-*

vius (71) in the *Ape* he diſſected, obſerved, the *Teſtes humanis majores.*

The *Pariſians* tell us, that in ſome of their Subjects the *Teſticles were long and ſtrait, and but one line in breadth, and eight in length. In one of their* Sapajous *they were found of a figure quite contrary, and almoſt as remote from the figure of thoſe of Man, being perfectly round.* Drelincourt's account in his *Ape* is, *Tunica Elytroides fibris carneis à Cremaſtere conſperſa, ut in homine. Arteria Spermatica miro luſu, ſpiratim revolvitur ſuper Teſticuli dorſum. Teſticulus autem Ventri Epididymidum adhæret, niſi fibrillis paucis & laxis, capite ſuo, quo Spermatica Deferentia admittit, ſeparatur illæſus, cauda autem ſua, qua ejaculatoria vaſa emittit, tot punctula candicantia exhibet, divulſus ab Epididymide, quot à Teſticulo canaliculi protenduntur.*

From the *Epididymis* in our *Pygmie* (as it is in a *Man*) was continued the *Vas Deferens*; a ſlender *Ductus*, which conveys the *Semen* from the *Teſticle* to the *Veſiculæ Seminales.* Theſe *Veſiculæ* were two *cellulated Bladders* placed under the neck of the *Bladder* of *Urine*; which on the outſide, did ſeem (as it were) nothing elſe but the *Vas Deferens* dilated, and placed in a waving figure there. And as the Body of the *Teſtes* was made up of a curious convoluted Contexture of *Seminal Veſſels*, which running into fewer, form at laſt the Body of the *Epididymis*; and *theſe Veſſels* afterwards paſſing all into one *Duct*, do make up the *Vas Deferens*: ſo this *Vas Deferens* here, being dilated and enlarged, does form the *Veſiculæ Seminales.* And the ſame is in a *Man.*

The *Pariſians* here do take notice of that Paſſage in *Ariſtotle* I have already quoted, where he likens the *Parts* of *Generation* in the *Male Ape* to thoſe of a *Dog*, more than a *Man.* But the *Philoſopher* herein, is under a Miſtake; for, as they inſtance, in the *Penis* of a *Dog*, there is a *Bone*, which is not in the *Monkey's*; ſo likewiſe in *Monkeys*, there are *Veſiculæ Seminales*, which are not to be met with in a *Dog.* They deſcribe them in their *Monkeys* thus: *The Glandulous Proſtatæ were ſmall*; *the* Paraſtatæ Cyrſoides *were in requital very large*; *they contained an Inch in length*; *their breadth was unequal, being four lines towards the neck of the Bladder, and a line and an half at the other end, differing herein from thoſe of Man, who has them ſtendereſt near the neck of the Bladder. They were compoſed of ſeveral little Baggs, which opened into one another. The Caruncle of the* Urethra *was ſmall, but very like to that of a Man. Blaſius* hath given us a *figure* of theſe Parts, which I do not like; as neither that of the *Pariſians.* He deſcribes them thus: *Veſiculæ Seminales hic valdè amplæ, quæ immiſſo flatu per ductum Seminalem Ejaculatorium inſignitèr intumeſcunt. Quod ſi premantur, manifeſtiſſimè obſervamus Mate-*

(71) *Jac. Sylvij Variorum Corporum diſſect. Operum*, p. m. 130.

riam

riam iis contentam moveri in Meatum Urinarium, Veſicæ continuum, & quidem per foramen ſingulare, quod in unoquoque latere unicum eſt, quæ res occaſionem videtur dediſſe Jacobo Sylvio duos ductûs Seminales in ſimiâ conſtituendi. All that *Drelincourt* ſaith of them is, *Vaſa ejaculatoria retrò Veſicam tendunt in Corpuſcula prædura mirè anfractuoſa, ut & ipſum initium Epididymidis.* Which is very conformable to what I obſerved in our *Pygmie.*

Between the root of the *Penis*, and neck of the *Bladder*, is ſeated the *Corpus Glanduloſum*, or the *Proſtatæ*, which in our *Pygmie* appeared the ſame as in *Man.* The *Pariſians* tell us in their *Monkeys* that they were ſmall. *Blaſius* in his *figure*, beſides the *Proſtates*, which he ſaith are *Glandula veſicis adſtans, albidior ſolidiorque* repreſents another, at the Letters (H. H.) viz. *Glandula alia, major, rubicunda & plexu Nervorum, aliorumque vaſorum prædita*; which is no *Gland*, but the *Bulb* of the *Penis. Drelincourt* in his *Ape* tells us, *Corpora Glandulosa duos velut Nates circa veſicæ cervicem ſuprà Sphincterem exhibent.*

We come now to the *Penis*, which in our *Pygmie* was two Inches long; the girth of it at the root was an Inch and a quarter; but it grew taperer towards the end. It had no *frænum*, ſo that the *Præpuce* could be retracted wholly down; and herein our *Pygmie* is different from a *Man.* The Slit of the *Penis* here was perpendicular as in a *Man.* In the *figure* the *Pariſians* give us, it ſeems to be horizontal, as it is plainly repreſented by *Bartholine* in his *third* and *fourth figure* of his *Mamomet*, altho' by his *ſecond figure* one would think otherwiſe. Whether there was any *Balanus* or *Glans* in the *Penis* of our *Pygmie*, or what it was, I am uncertain: I do not remember I obſerved any. In my *third figure* the *Penis* is repreſented decurtated at the end, and without the *Præputium*, which was left entire to the Skin. *Dreclincourt*'s account of it in the *Ape* is this; *Genitale prorsùs expers eſt frænuli ac proinde Præputium devolvitur ad radicem uſque Penis, & denudatur Glans ipſa, atque Penis integer. Balanus conſimilis virili, excepto frænulo, atque præterea hiatum maximum exhibet, quâ parte Ligamenta Cavernoſa deſinant, & Glans utrinque prominet.* At the root of the *Penis* of our *Pygmie*, we obſerved the *Muſculi Erectores* to be ſhort, and thicker proportionably than in a *Man*; and the *Ligamentum Suſpenſorium* larger: The *Muſculus accelerator Urinæ* was large, covering the *Bulb* of the *Cavernous body* of the *Urethra.* The *Corpora Nervoſa*, or the two *Cavernous bodies* of the *Penis* were divided length-ways by a *Sepimentum* in the middle, as in *Man.* In the *Urethra* likewiſe there was a *Cavernous body.* The *Veſſels* of the *Penis* anſwered exactly to thoſe of a *Man.*

Blaſius in his *Ape* ſaith, *Penis Nervoſum Corpus unicum tantum habere videtur, ſepimento notabili deſtitutum.* But I am apt to think he might be miſtaken; for in our Subject 'twas very plainly divided, but more remarkably

markably towards the root than forwards. What he adds afterwards, *Circa radicem Penis Tuberculum exile occurrit, exteriùs carnoſæ naturæ, interiùs reticulari vaſorum plexu refertum, interſtitia ipſius materiâ rubicundâ occupante*, by this I ſuppoſe he means the *Bulb* of the *Penis*. *Drelincourt* expreſſes it better, where he ſaith, *Totus Penis duobus Ligamentis Cavernoſis à tuberibus Iſchij gaudet*. In our Subject theſe two bodies were very large and *cavernous* within. But what *Drelincourt* adds, *Urethra planè carnoſa*; This was different in our *Pygmie*; for as I have mention'd, the ſides of the *Urethra* here were *Cavernous* too, tho' not much.

How the *Organs* of *Generation* are in the *Female* of this *Species* of *Animals*, I have had no opportunity of informing my ſelf. But by *Analogy* I can't but think, they muſt be very like to thoſe of a *Woman*, ſince they are ſo even in *Monkeys* and *Apes* in ſeveral reſpect; tho' in ſome, they imitate the Structure of theſe Parts in *Brutes*. Thus the *Pariſians* obſerve, *The generative Parts of the Female had alſo a great many things which rendered them different from thoſe of* Bitches, *herein reſembling thoſe of* Women; *there were ſome of them likewiſe which were as in* Bitches, *and after another manner than in* Woman; *for the exteriour Orifice was round and ſtrait, as in* Bitches, *and the generality of other Brutes, and had neither* Nymphæ *nor* Carunculæ. *The Neck of the Bladder had it's hole otherwiſe than in* Woman, *being very far in the Neck of the* Matrix, *viz. towards the middle, at the place where it's roughneſs began, which were ſeen only towards the extremity of the* Ductus *near the Internal Orifice. The Trunks of the* Matrix *were alſo different from thoſe of Women, and reſembling thoſe of Brutes in that they were proportionably longer, and more redoubled by various turnings. The* Clitoris *had ſomething more conformable to that which is ſeen in other Brutes that have it, than in that of Women, being proportionably greater, and more viſible than it is in Women. It was compoſed of two Nervous and Spongious Ligaments, which proceeding from the lower part of the* Os Pubis, *and obliquely advancing to the ſides of theſe Bones, did unite to form a third Body, which was ten lines in length. It was formed by uniting of the two firſt, which a very ſtrong Membrane joyned together, going from one of the Ligaments to the other, beſides a hard and nervous Membrane which inveloped them. They terminated at a Gland like to that of the* Penis *of the Male. The little Muſcles, which were faſtned to theſe Ligaments, proceeded as uſual from the tuberoſities of the* Iſchium. *Theſe Ligaments were of Subſtance ſo thin and ſpongious, that the wind penetrated, and made them eaſily to ſwell, when blown into the Network of the Veins and Arteries which is in this place. This Network was viſible in this Subject, being compoſed of larger Veſſels than they proportionably are in Women. It was ſituated as uſually under the ſecond pair of Muſcles of the* Clitoris. *It's figure was* Pyramidal, *ending from a very large* Baſis *in a point, which run along the third Ligament to it's extremity towards the Gland.*

The

The reſt of the Parts of Generation were like to thoſe of Women. The Neck of the Bladder had it's Muſcles as in Women: For there were a great number of fleſhy Fibres, which proceeding from the Sphincter *of the* Anus, *were faſtened to the ſides of the Neck of the* Uterus, *and other ſuch like Fibres which did come from the* Sphincter *of the Bladder to inſert themſelves at the ſame place. The Body of the* Uterus, *it's Membranes, internal Orifice, it's Ligaments as well the round as broad, and all it's Veſſels had a conformation intirely like to that, which theſe ſame Parts have in Women. The Teſticles, which were ten lines long, and two broad, were as in Women, compoſed of a great number of ſmall Bladders, and faſtned near the Membranes which are at the extremity of the* Tubæ, *and which is called their Fringe.*

Drelincourt hath very little on this Subject, all he ſaith is, *Urethra rubicunda ſolida & brevis. Vagina admodum rugoſa, monticulum habens in medio, Papillis extuberans ut in Palato, Pollicem longa, tranſverſim ſciſſa, Pollicem lata. Orificium interiùs valdè ſolidum. Cervix interior admodùm dura, & paulò intrà oſculum internum duritie cartilaginoſâ.*

We ſhall proceed now to the Parts of the *Middle Venter*, the *Thorax*; and here, as the Parts are fewer, ſo my Remarks will be alſo: and the rather, becauſe in our *Pygmie* we obſerved ſo very little difference from the Structure of the ſame Parts in a *Man*. I muſt confeſs I can't be ſo particular in all Circumſtances, as I would, becauſe for the preſerving the *Sceleton* more entire, I did not take off the *Sternum*. However, I obſerved enough to ſatisfie my ſelf with what I thought moſt material.

This *Cavity* was divided from the *Abdomen* by the *Diaphragm*, whoſe *Aponeuroſis* or *Tendon* ſeemed rather larger than in a *Man*: and the *ſecond Muſcle* which encompaſſed the *Gula*, as it paſſes through it, was very fair.

I made no Remarks upon the *Pleura*, and *Mediaſtinum*: The *Thymus* in our *Pygmie* was about an Inch long, and placed as 'tis in *Man*; downwards 'twas divided, but upwards 'twas joyned together. So in a *Man* I have often obſerved it divided. Generally this part is larger in *Infants* and *Embrios* than in *grown Perſons*, for the Reaſons I have frequently mentioned in my *Anatomical Lectures*. The *Pariſians* obſerved in their *Monkeys* that the *Thymus* was large. *Blaſius* and *Drelincourt* have no Remarks about it.

The *Lungs* in our *Pygmie* had three *Lobes* on one ſide, and but two on the other; five in all. Their Colour, Subſtance, Situation, and all Circumſtances exactly reſemble a *Man*'s. The *Pariſians* tell us, that in their *Monkeys the Lungs had ſeven Lobes, three on the right ſide, and as*

many

many on the left, the ſeventh was in the Cavity of the Mediaſtine, *as in the generality of Brutes. This again makes a notable difference between the internal parts of the* Ape, *and thoſe of* Man, *whoſe Lungs have generally at the moſt but five Lobes, oftener but four, and ſometimes but two.* Veſalius *affirms that he never ſaw in Man this fifth Lobe, which he reports to be in* Apes, *ſuppoſing that they have but five.* The Paſſage that the *Pariſians* hint at in *Veſalius* is this, *Lobum autem qui in Canibus, ſimiiſque Venæ Cavæ Caudicem ſuffulcit, nunquam in homine obſervavi, & hunc illo deſtitui certo certius ſcio, quamvis interim* Galeni *locus in ſeptimo de adminiſtrandis Diſſectionibus mihi memoria non exciderit, quo inquit, quintum hunc Pulmonis Lobum eos non latêre, qui rectè ſectionem adminiſtrant; innuens* Herophilo *&* Marino *ejuſmodi Lobum fuiſſe incognitum, uti ſanè fuit, cùm illi Hominum Cadavera, non autem cum ipſo, ſimiarum ac Canum duntaxat aggrederentur, in quibus præſenti Lobo nihil eſt manifeſtius.* (72) Tho' *Galen* be herein miſtaken, *Veſalius* certainly is too ſevere in his Cenſure, in charging him, that he never diſſected any thing but *Apes* and *Dogs*; for the contrary evidently appears in abundance of Inſtances, that might be produced. And one would think he had not diſſected *Apes* and *Monkeys* in making but five *Lobes* in their *Lungs*, whereas in either there are more. In what he argues, that this *fifth Lobe* in a Man could not lie upon the *Vena Cava*; becauſe in a *Man* the *Pericardium* is faſtened to the *Diaphragm*, and the *Vena Cava* enters there, and ſo immediately paſſes to the *Heart*; this is true, and the ſame I obſerved in our *Pygmie*. So that in the formation of this Part, our *Pygmie* exactly reſembles a *Man*; and is different from both the *Monkey* and *Ape*-kind. The former we have ſeen; as to the latter, *Drelincourt* tells us in the *Male Ape*; *Pulmo dexter quadrifidus, Lobus infimus omnium craſſiſſimus, ſuperior minùs craſſus, intermedius reapsè medius ſitu & magnitudine. Quartus demùm crenam inſculptam habet, quâ parte Cavæ fulcrum præbet. Pulmo ſiniſter biſidus, & Lobus ejus ſuperior bifurcatus.* So in the *Female Ape*, *Lobi Pulmonis dextri totalitèr diviſi IV, quorum ſuperior, biſidus totus, adeo ut ſint quinque in eâ parte: ſiniſter Pulmo biſidus totus, & Lobus ſuperior ultrà dimidium ſui diviſus.*

The *Trachæa* or *Wind-pipe* in our *Pygmie* was altogether the ſame as in a *Man*; conſiſting of a regular order of *Cartilaginous Annuli*, which were not perfectly continued round; but towards the *Spine*, were joyned by a ſtrong Membrane. *Drelincourt* ſaith of it, *Trachææ annuli ſe habent uti Inteſtinorum ſpiræ, nervoſis Membranis colliguntur.* The Compariſon, I think, is not ſo well made.

(72) *Andr. Veſalij de Corporis humani fabrica*, lib. 6. cap. 7. p. 724.

For

For the preſent we will leave following the Duct of the *Trachæa* up to the *Larynx*, (the Part according to the Method of *Nature*, we ſhould have began with) and make ſome farther Obſervations, on thoſe under our preſent view. In the Cavity of the *Thorax* therefore, (as I have remark'd) the *Pericardium* or that *Bag* that incloſes the *Heart* in our *Pygmie*, was faſtened to the *Diaphragm*, juſt as 'tis in *Man*. I muſt confeſs, when I firſt obſerved it, I was ſurpriſed, becauſe I had not ſeen it ſo in *Brutes* before. And *Veſalius*, and others make it as a peculiarity to a *Man*. I will quote *Veſalius*'s words, and make an Inference from our Obſervation, and ſo proceed.

Veſalius (73) therefore tells us, *Cæterum Involucri mucro, & dextri ipſius lateris egregia portio Septi tranſverſi nerveo circulo validiſſimè, amploque admodùm ſpatio connaſcitur, quod Hominibus eſt peculiare. Simiis quoque & Canibus & Porcis involucrum à ſepto multùm diſtat. Tantùm abeſt ut ipſi magnâ ſui portione connecteretur, adeò ſanè ut & hinc luce clarius conſtet, Galenum hominis viſcera aut oſcitanter, aut neutiquàm ſpectâſſe, Simiaſque & Canes nobis deſcribentem, immerito veteres arguiſſe.* He can't forbear at all turns to have a fling at *Galen*: But he is here in the right, and *Galen* miſtaken. So *Blancardus* (74) tells us, *Homo præ cæteris Animalibus hoc peculiare habet, quod ejus Pericardium Septi tranſverſi medio ſemper accreſcat, cum idem in Quadrupedum genere liberum, & aliquanto ſpatio ab ipſo remotum ſit.*

Now our *Pygmie* having the *Pericardium* thus faſtened to the *Diaphragm*, it ſeems to me, as if Nature deſigned it to be a *Biped* and to go *erect*. For therefore in a Man is the *Pericardium* thus faſtened, that in *Expiration* it might aſſiſt the *Diaſtole* of the *Diaphragm*: for otherwiſe the *Liver* and *Stomach* being ſo weighty, they would draw it down too much towards the *Abdomen*; ſo that upon the *relaxation* of it's Fibres in it's *Diaſtole*, it would not aſcend ſufficiently into the *Thorax*, ſo as to cauſe a Subſidence of the *Lungs* by leſſening the Cavity there. In *Quadrupeds* there is no need of this adhæſion of the *Pericardium* to the *Diaphragm*: For in them, in *Expiration*, when the Fibres of the *Diaphragm* are relaxed, the weight of the *Viſcera* of the *Abdomen* will eaſily preſs the *Diaphragm* up, into the Cavity of the *Thorax*, and ſo perform that Service. Beſides, was the *Pericardium* faſtened to the *Diaphragm* in *Quadrupeds*, it would hinder it's *Syſtole* in *Inſpiration*; or it's deſcent downwards upon the contraction of it's *Muſcular Fibres*; and the more, becauſe the *Diaphragm* being thus tied up, it could not then ſo freely force down the weight of the *Viſcera*, which are always preſſing upon it, and conſequently not ſufficiently dilate the Cavity of the *Thorax*, and therefore muſt hinder their *Inſpiration*. Thus we ſee how neceſſary it is,

(73) *Andr. Veſalij de Corporis Humani fabrica*, lib. 6. cap. 8. p. m. 728. (74) *Steph. Blancardi Anatom. reformat.* cap. 2. p. 8.

that in a *Man* the *Pericardium* ſhould be faſtened to the *Diaphragm*; and in *Quadrupeds* how inconvenient it would be; that from hence I think we may ſafely conclude, that *Nature* deſign'd our *Pygmie* to go erect, ſince in this particular 'tis ſo like a *Man*; which the common *Apes* and *Monkeys* are not; and tho' they are taught to go *erect*, yet 'tis no more than what *Dogs* may be taught to do.

We proceed now to the *Heart*; where we obſerved that in our *Pygmie*, it's *Auricles*, *Ventricles*, *Valves* and *Veſſels* were much the ſame as they are in a *Man*'s. It's *Cone* was not ſo pointed, as in ſome *Animals*, but rather more obtuſe and blunt, even more than a *Man's*. What *Avicenna* (75) remarks of the *Heart* of an *Ape*, having a *double Cone*, muſt be accidental and extraordinary: for he tells us, *Et jam repertum eſt Cor cujuſdam Simij habens duo Capita.* And a little after, he denies the *Heart* to be a *Muſcle*; *Jam autem erravit* (ſaith he) *qui exiſtimavit, quòd ſit Lacertus, quamvis ſit ſimilium rerum in eo, verùm motus ejus non eſt voluntarius.* The Perſon he hints at, I ſuppoſe, is *Hippocrates*, who ſo long ago aſſerted this; Ἡ καρδίη (ſaith (76) *Hippocrates*) μῦς ἐστιν κάρτα ἰσχυρὸς, οὐ τῷ νεύρῳ, ἀλλὰ πιλήματι σαρκός. *Cor muſculus eſt validus admodùm non Nervo, verùm Carnis ſpiſſamento.* And *Steno* and Dr. *Lower* ſince have ſhewed us the way of diſſecting it, and have made it moſt evident that 'tis Muſcular; and it's *motion* is ſuch; but as *Avicenne* obſerves, 'tis not a *voluntary* motion, but *involuntary*. 'Tis pity we had not a better *Tranſlation* of *his Works*; for unleſs it be ſome particular Pieces, the reſt is moſt barbarouſly done, as appears from that little I have quoted of him. But to return to our *Pygmie*; the magnitude and figure of the *Heart* here, was exactly the ſame as repreſented in our *Scheme*, where part of the *Pericardium* is left lying on it. Both in the right and left *Auricle* and *Ventricle*, I obſerved two *Polypous Concretions*, which plainly repreſented the *Valves* both in the *Arteria Pulmonalis*, and *Aorta*. I muſt confeſs by what I have hitherto obſerved of them, (and I have very frequently met with ſuch *Concretions* in *Humane Bodies*) I cannot think theſe *Polypus*'s to be any thing elſe, than the *Size* of the Blood, or the *Serum coagulated* after Death. The Obſervation I formerly gave (77) of a *Polypus* in the *Trachæa* and *Bronchiæ* of a Patient troubled with an *Hæmoptoe*, in it's kind I think remarkable.

The *Pariſians* obſerve that *the Heart of their* Monkey *was a great deal more pointed, than it uſually is in* Man; *which is likewiſe a Character of* Brutes. *Yet in the interiour* Superficies *of it's* Ventricles, *it had that great number of Fibres and* fleſhy Columns, *which are ſeen in Men. Drelincourt* in his *Ape* obſerves, *Cor ſolidum in ventriculo ſiniſtro, laxum in dextro; prædurus Conus ejus: Serum in Pericardio ſalſum. Vaſa Coronaria tumida, præſertim circà Ventriculum. Adeps circà ea nullus.*

(75) *Avicenna* lib. 3. Fen. 2. Tract. 1. p.m. 670 (76) *Hipp. de Corde*, p.m. 270. (77) *Vide Tho. Bartholini Acta Med. & Philoſ. Hafnienſ. Vol.* 5. *Obſ.* 30. p. 94.

There

There was nothing farther, I think, that I obſerved peculiar in the *Thorax* of our *Pygmie*. I ſhall now therefore follow the Duct of the *Trachæa* up to the *Throat*. And here as in *Man*, I obſerved placed the *Glandula Thyroidea*, upon the *Cartilago Scutiformis* of the *Larynx*; 'twas red and ſpungy, full of Blood veſſels, not much unlike the inward Part of the *Spleen*, but ſomewhat firmer. In a Man I have always obſerved this part to be red. *Drelincourt*'s Account of it in the *Ape* is, *Glandulæ Thyroideæ & Cricoideæ craſſæ ſunt, & ſubnigricantes; & illas permeant ſurculi Corotidis Arteriæ & Jugularis venæ externæ; cum ſurculis Nervi Recurrentis.* There is no ſenſible account yet given of the uſe of this part, as I have met with: And I think that from a Comparative Survey of it in other Animals, and a ſtrict Obſervation of it's Structure, and the Veſſels that compound it, it were not difficult to aſſign other uſes of it more ſatisfactory.

As to the *Larynx* in our *Pygmie*, unleſs I enumerate all the *Cartilages* that go to form it, and the *Muſcles* that ſerve to give them their Motion, and the *Veſſels* that run to and from it, and the *Membranes* and *Glands*, there is nothing that I can further add, but only ſay, that I found the whole Structure of this Part exactly as 'tis in *Man*. And the ſame too I muſt ſay of the *Os Hyoides*. The *Reflection* that the *Pariſians* make upon the obſervation of this, and it's neighbouring Parts in the Diſſection of their *Monkey*'s, I think is very juſt and valuable. And if there was any farther advantage for the forming of *Speech*, I can't but think our *Pygmie* had it. But upon the beſt Enquiry, I was never informed, that it attempted any thing that way. Tho' *Birds* have been taught to imitate *Humane Voice*, and to pronounce Words and Sentences, yet *Quadrupeds* never; neither has this *Quadru-manous Species* of *Animals*, that ſo nearly approaches the Structure of *Mankind*, abating the *Romances* of *Antiquity* concerning them.

The *Pariſians* therefore tell us, *That the* Muſcles *of the* Os Hyoides, Tongue, Larynx, *and* Pharynx, *which do moſt ſerve to articulate a word, were wholly like to thoſe of* Man; *and a great deal more than thoſe of the* Hand; *which nevertheleſs the* Ape, *which ſpeaks not, uſes almoſt with as much perfection as a* Man. *Which demonſtrates, that Speech is an Action more peculiar to Man, and which more diſtinguiſhes him from Brutes than the* Hand; *which* Anaxagoras, Ariſtotle, *and* Galen *have thought to be the* Organ *which Nature has given to* Man, *as to the wiſeſt of all Animals*; for *want perhaps of this Reflection: For the* Ape *is found provided by* Nature *of all thoſe marvellous* Organs *of Speech with ſo much exactneſs, that the very three ſmall Muſcles, which do take their riſe from the* Apophyſes Styloides, *are not wanting, altho' this* Apophyſis *be extreamly ſmall. This particularity does likewiſe ſhew, that there is no reaſon to think, that Agents do perform ſuch and ſuch actions, becauſe they are found with Organs proper there-*

unto; for, according to theſe Philoſophers, Apes ſhould ſpeak, ſeeing that they have the Inſtruments neceſſary for Speech.

I ſhall not engage in this Argument here, becauſe it would be too great a digreſſion; hereafter, it may be, I may take an occaſion to do it; for this is not the only Inſtance in our Subject, that will juſtifie ſuch an Inference: tho' I think it ſo ſtrong an one, as the *Atheiſts* can never anſwer.

We ſhall take notice next of the *Uvula*, a Part of ſome uſe too in forming the *Voice*; for where 'tis miſſing or vitiated, it much alters the *ſound*; and even this I found in our *Pygmie* to be altogether alike as in *Man*. It had thoſe two Muſcles which are in a *Man*, the *Muſculus Sphæno-Palatinus*, and the *Pterigo-Palatinus ſeu Sphæno-Pterigo-Palatinus*; the Tendon of which laſt, paſſed over the *Pterigoidal Proceſs*, which was to it like a *Trochlea* or *Pully*, and was afterwards inſerted as in a *Man*.

The *Pariſians* tell us that *the* Uvula, *which is in no other Brutes, was found in our Apes* (it ſhould be *Monkeys*) *wholly reſembling that of Man*. And ſo *Blaſius*, *Uvula in Animalibus aliis præter hominem & ſimiam nunquam à me obſervata*. All that *Drelincourt* ſaith of it is, *Uvula firma eſt & carnoſa*.

The *Tongue* of our *Pygmie* in all reſpects, as I know of, reſembled a *Humane Tongue*; only becauſe 'twas ſomewhat narrower, it ſeemed longer: And under the *Tongue* in our *Pygmie* we obſerved the *Glandulæ Sublinguales* as in *Man*.

Drelincourt obſerves in the *Ape*, *Linguæ baſis non tantùm incumbit Hyoidi ſuperno, ſed amplectitur ejus tuber inferius poſticè: Papillas habet Bovinis ſimiles, & tunicam propriam permeantes*.

At the Root of the *Tongue* of each ſide were placed the *Tonſillæ* in our *Pygmie*, as they are in a *Man*. They were protuberant and hard, and not ſo foraminulous, as uſually in Man; very probably being vitiated by the *Ulcer* in the Cheek. For *Drelincourt* tells us in the *Ape*, *Amygdalæ cavæ, pertuſæ & Scrobiculos habentes*.

The *Parotides* under each *Ear* in our *Pygmie* were large, and of the ſame Figure as in *Man*. *Parotis glandula contegit Muſculum Sterno-Maſtoideum, articulationem Maxillæ & Muſculi Pectoralis portionem*, ſaith *Drelincourt*.

The *Maxillary Gland* of the left ſide (where the Ulcer in our *Pygmie* was) had two of it's Lobes, globous and protuberant, above the Surface of the other Part, being infected and tumefied by the Ulcerous Matter. Theſe *Glands* were about an Inch long, and about half an Inch broad; and

and there were two other ſmall *Glands* a little diſtant from the head of the *Maxillary*. *Glandulæ ſalivales ad angulum Maxillæ Inferioris oblongæ, laxæ, molles, albicantes*, ſaith *Drelincourt*.

But before I leave theſe Parts, there are ſome others I muſt here take notice of, in this *Comparative Survey*; which tho' they are not to be met with, either in our *Pygmie* or in *Man*; yet are very remarkable, both in the *Monkey* and *Ape-kind*, viz. thoſe *Pouches* the *Monkeys* and *Apes* have in their *Chaps*, which ſerve them as *Repoſitories* for to hoard up, upon occaſion, food in; when they are not diſpoſed for the preſent to devour it; but when there *Stomachs* ſerve them, they then take it out thence and ſo eat it. That the *Ape-kind* has theſe *Pouches*, *Drelincourt* does inform us; where he tells us, *Muſculus latiſſimus Mentum univerſum & buccas obtegit, quâ parte ſimiæ ſaccum formant, intra quem Eſculenta recondunt. Pliny* is very expreſs, That both *Satyrs* and *Sphinges* (which I make to be of the *Monkey-kind*) have them likewiſe, (78) *Condit in Theſauros Maxillarum Cibum Sphingiorum & Satyrorum Genus. Mox inde ſenſim ad mandendum manibus expromit; & quod formicis in annum ſolenne eſt, his in dies vel horas.* The account the *Pariſians* give us of this *Pouch* in the Mouth of the *Monkeys* they diſſected, is this; *That it was compoſed of Membranes and Glands, and of a great many Muſculous and Carnous Fibres. It's ſituation was on the outſide of each Jaw, reaching obliquely from the middle of the Jaw to the under part of it's Angle, paſſing under a part of the Muſcle called* Longiſſimus. *It was an Inch and an half long, and almoſt as broad towards it's bottom. It opened into the Mouth between the Jaw and the bottom of the Gum. 'Tis into this Pouch that Apes uſe to put what they would keep; and it is probable that the Muſculous Fibres which it has, do ſerve to ſhut and open it, to receive and put out what theſe Animals do there lay up in reſerve.* Now our *Pygmie* having none of theſe *Pouches* in it's Chaps, nor nothing like them; 'tis a notable difference both from the *Monkey* and *Ape-kind*, and an Agreement with the *Humane*.

We ſhould now come to diſcourſe of the *five Senſes*: But there is little I have at preſent to remark of them. For in the *Organs* of thoſe of *Tactus*, and *Guſtus*, there was no difference I could obſerve between our *Pygmie* and a *Man*. As to thoſe of *Hearing* and *Smelling*, I ſhall make my Obſervations upon them, in the *Oſteology*. Here therefore I ſhall only remark ſome things of the *Eyes*, the *Organs* of Seeing; and ſo proceed to the *Brain*.

The Bony *Orbit* of the *Eye* in our *Pygmie* was large, conical, and deep. Here we obſerved the *Glandula Lachrymalis*, and *Innominata*. The *Bulb* of the *Eye* in proportion to the Bulk of the Body, was rather larger than in a *Man*. The *Iris* was of a light hazel Colour: The *Pu-*

(78) *Plinij Hiſt. Nat.* lib. x. cap. 72. p. m. 466.

pil

pil round and large: The *Cryſtalline Humour* Sphærical or *Lentiformis*, and almoſt as large as in a *Man*. The *Optic Nerve* was inſerted exactly as in a *Man*. The *Tunica Choroides* rather blacker than in a *Man*. And whereas in *Brutes*, that are *prono Capite*, there is uſually a *Muſculus Septimus*, which from it's uſe is call'd *Suſpenſorius*; in our *Pygmie* there was none of this *Muſcle*. All the other *Muſcles* of the Eye, were exactly the ſame as in *Man*. This *ſeventh Muſcle* is alſo wanting in the *Ape*, as appears by the figures *Caſſerius* (79) has given us of the *Eye* of an *Ape*. Neither the *Pariſians*, nor *Blaſius*, nor *Drelincourt* do give us any Remarks upon this *Part*.

We proceed now to the *upper Venter*, the *Head*, where at preſent we ſhall examine the *Brain*; that Part, which if we had proceeded according to the *Method of Nature* in forming the Parts, we muſt have began with. For I can't but think, as 'tis the firſt Part we obſerve formed, ſo that the whole of the Body, *i. e.* all the *Containing Parts*, have their riſe from it. But I ſhall not enlarge upon this Argument here; it would be too great a digreſſion, to give my Reaſons for ſuch an *Hypotheſis*. From what is generally received, *viz.* That the *Brain* is reputed the more immediate Seat of the *Soul* it ſelf; one would be apt to think, that ſince there is ſo great a diſparity between the *Soul* of a *Man*, and a *Brute*, the *Organ* likewiſe in which 'tis placed ſhould be very different too. Yet by comparing the *Brain* of our *Pygmie* with that of a *Man*; and, with the greateſt exactneſs, obſerving each Part in both; it was very ſurpriſing to me to find ſo great a reſemblance of the one to the other, that nothing could be more. So that when I am deſcribing the *Brain* of our *Pygmie*, you may juſtly ſuſpect I am deſcribing that of a Man, or may think that I might very well omit it wholly, by referring you to the accounts already given of the *Anatomy* of an *Humane Brain*, for that will indifferently ſerve for our *Pygmie*, by allowing only for the magnitude of the Parts in *Man*. Tho' at the ſame time I muſt obſerve, that proportionably to the Bulk of the Body, the *Brain* in our *Pygmie*, was extreamly large; for it weighed (the greateſt part of the *Dura Mater* being taken off) twelve Ounces, wanting only a Dram. The *Pariſians* remark, that in their *Monkeys the* Brain *was large in proportion to the Body, it weighing two Ounces and a half:* which nevertheleſs was inconſiderable to ours; ſince our *Pygmie* exceeded not the Stature and Bulk of the Common *Monkey* or *Ape*; ſo that herein, as in a great many other Circumſtances, our *Pygmie* is different from the Common *Monkey* and *Ape*, and more reſembles a *Man*.

I can't agree with *Veſalius*, that the Structure of the *Brain* of all *Quadrupeds*, nay all *Birds*, and of ſome *Fiſhes* too, is the ſame as in Man.

(79) *Jul. Caſſerij Placentini Penteſtheſeion, h. e. de quinque ſenſibus. Vide de Organo vijus.* Tab. 3. fig. 12, 13.

There

There is a vaſt difference to be obſerved in the formation of the Parts, that ſerve to compoſe the *Brain* in theſe various *Animals*. And tho' the *Brain* of a *Man*, in reſpect of his Body, be much larger than what is to be met with in any other *Animal* (for *Veſalius* makes the *Brain* of a *Man* to be as big as thoſe of three Oxen) yet I think we can't ſafely conclude with him, that *Animals*, as they excell in the largeneſs of the *Brain*, ſo they do likewiſe in the Principal Faculties of the *Soul*: For if this be true, then our *Pygmie* muſt equal a *Man*, or come very near him, ſince his *Brain* in proportion to his Body, was as large as a *Man's*. *Veſalius* (80) his words are theſe; *Cerebri nimirùm conſtructione Simia, Canis, Equus, Felis, & Quadrupeda quæ hactenùs vidi omnia, & Aves etiam univerſæ, plurimaque Piſcium genera, omni propemodùm ex parte Homini correſpondeant: neque ullum ſecanti occurrat diſcrimen, quod ſecùs de Hominis, quàm illorum Animalium functionibus ſtatuendum eſſe præſcribat. Niſi fortè quis meritò dicat Cerebri molem Homini, Perfectiſſimo ſanè quod novimus Animali, obtigiſſe maximam, ejuſque Cerebrum etiam tribus Boum Cerebris grandius reperiri: & dein ſecundum Corporis proportionem mox Simiæ, dein Cani magnum quoque non ſecus obtingere Cerebrum, quàm ſi Animalia Cerebri tantum præſtarent mole, quanto Principis Animæ viribus apertius viciniúſve donata videntur.*

Since therefore in all reſpects the *Brain* of our *Pygmie* does ſo exactly reſemble a *Man's*, I might here make the ſame Reflection the *Pariſians* did upon the *Organs* of *Speech*, *That there is no reaſon to think, that Agents do perform ſuch and ſuch Actions, becauſe they are found with Organs proper thereunto:* for then our *Pygmie* might be really a *Man*. The *Organs* in *Animal* Bodies are only a regular *Compages* of Pipes and Veſſels, for the *Fluids* to paſs through, and are paſſive. What actuates them, are the *Humours* and *Fluids*: and *Animal Life* conſiſts in their due and regular motion in this *Organical* Body. But thoſe *Nobler Faculties* in the *Mind* of *Man*, muſt certainly have a *higher Principle*; and *Matter organized* could never produce them; for why elſe, where the *Organ* is the ſame, ſhould not the *Actions* be the ſame too? and if all depended on the *Organ*, not only our *Pygmie*, but other *Brutes* likewiſe, would be too near akin to us. This Difference I cannot but remark, that the *Ancients* were fond of making *Brutes* to be *Men*: on the contrary now, moſt unphiloſophically, the *Humour* is, to make *Men* but meer *Brutes* and *Matter*. Whereas in truth *Man* is part a *Brute*, part an *Angel*; and is that *Link* in the *Creation*, that joyns them both together.

This *Digreſſion* may be the more pardonable, becauſe I have ſo little to ſay here, beſides juſt naming the *Parts*; and to tell you (what I have already) that they were all like to thoſe in a *Man*: For the *Dura Mater*, as a *Common Membrane*, firmly ſecured the ſituation of the whole *Brain*, ſtrictly

(80) *And. Veſalij de Corporis Humanis fabrica*, lib. 7. cap. 1. p. 773, 774.

adhering

adhering to the *Sutures* of the *Cranium* above; before to the *Criſta Galli*; and at the *baſis* ſo ſtrongly, that it was not eaſily to be ſeparated. By it's *anterior Proceſs* of the *Falx*, it divided the two *Hemiſpheres* of the *Cerebrum*; by it's *tranſverſe Proceſs*, which deſcended deep, juſt as in a *Man*, it ſeparated the *Cerebrum* and *Cerebellum*: it enjoyed the ſame *Sinus*'s, and in all Particulars 'twas conformable to what is in a *Man*.

The *Pia Mater* in our *Pygmie* was a fine thin Membrane which more immediately covered the Subſtance of the *Brain*, and may be reckoned it's *proper Membrane*; inſinuating it's ſelf all along between the *Anfractus* of the *Cerebrum* and the *Circilli* of the *Cerebellum*; being copiouſly furniſhed with numerous Branches of *Blood Veſſels*, but they appear'd more on the *Convex* Part, then at the *Baſis*.

The *figure* of the whole *Brain* in our *Pygmie* was globous; but by means of a greater jutting in of the Bones of the *Orbit* of the *Eye*, there was occaſioned a deeper depreſſion on the *Anterior Lobes* of the *Brain* in this place, than in a *Man*. As to other Circumſtances here, I obſerved all Parts the ſame. The *Anfractus* of the *Cerebrum* were alike; as alſo the *Subſtantia Corticalis* and *Medullaris*. On the *baſis* of the *Brain*, we may view all the *Ten pair* of *Nerves* exactly ſituated and placed as in a *Humane Brain*; nor did I find their Originations different, or any Particularity that was ſo. I ſhall therefore refer to the *figures* I have cauſed to be made of the *Brain*, and their Deſcriptions; where we may obſerve the *Arteriæ Carotides*, *Vertebrales*, and *Communicans*, and the whole of the *Blood Veſſels* in our *Pygmie* to be the ſame as in a Man. Here was the *Infundibulum*, the *Glandulæ duæ albæ ponè Infundibulum*, the *Medulla Oblongata* with it's *Annular Protuberance*, and the beginning of the *Medulla Spinalis*, juſt as in *Man*. I am here only a *Nomenclator*, for want of Matter to make particular Remarks upon. And the Authorrs that have hitherto furniſhed me with Notes, how the ſame *Parts* are in *Apes* and *Monkeys*, do fail me now; it may be, finding here nothing new or different, they are therefore ſilent. All the *Pariſians* do tell us of the *Brain* in their *Monkeys* is this:

The Brain *was large in proportion to the Body: It weighed two Ounces and an half. The* Dura Mater *entered very far to form the* Falx. *The Anfractuoſities of the External part of the Brain were very like thoſe of Man in the Anteriour part; but in the inward parts before the Cerebellum, there was hardly any: they in requital were much deeper in proportion. The* Apophyſes, *which are called* Mamillares, *which are great Nerves that do ſerve to the ſmelling, were not ſoft, as in Man, but hard and membranous. The* Optick *Nerves were alſo of a Subſtance harder and firmer than ordinary. The* Glandula Pinealis *was of a Conical figure, and it's point was turned towards the hinder part of the Head. There was no* Rete Mirabile: *for the* Carotides *being entered into the Brain, went by one ſingle Trunk on each ſide of*

of the edge of the ſeat of the Sphenoides *to pierce the* Dura Mater, *and to be diſtributed into the baſis of the Brain.* In our Subject I thought the *Anfractus* of the Brain much the ſame, both in the anteriour and hinder part. Nor did I obſerve any difference in the *Mamillary Proceſſes* or *Optick Nerves*, or *Rete Mirabile*, but all, as in a *Man*.

The *Cerebellum* in our *Pygmie* was divided by *Circilli*, as in *Man*. It had likewiſe the *Proceſſus Vermiformes*. Dr. *Willis* (80) makes this Remark upon this Part: *Cerebellum autem ipſum, in quibuſvis ferè Animalibus, ejuſdem figuræ & proportionis, nec non ex ejuſmodi lamellis conſtatum reperitur. Quæ Cerebrum diverſimodè ab homine configuratum habent, uti* Volucres *&* Piſces, *item inter Quadrupedes* Cuniculi *&* Mures, *quorum Cerebra gyris ſeu convolutionibus carent; his Cerebelli ſpecies eadem, ſimilis plicarum diſpoſitio & Partium cæterarum compoſituræ exiſtunt.* 'Tis from hence he forms his noted *Hypotheſis*, How that the *Animal Spirits* that are bred in the *Cerebrum*, do ſerve for *Voluntary Motions*; and thoſe in the *Cerebellum* for *involuntary*.

If we ſurvey the inward Parts of the *Brain* in our *Pygmie*, we ſhall here likewiſe find all exactly as in a *Humane Body*; *viz.* The *Medullary* Subſtance running up between the *Cortical*; The *Concameration*, the *Corpus Calloſum*, the *Fornix* and it's *Crura* the ſame. The *Ventricles* large and ſpatious. The *Corpora Striata*, the *Thalami Nervorum Opticorum* all alike. The *Plexus Choroides* the ſame; as were alſo the three *Foramina* as in *Man*; The *Glandula Pinealis* proportionably large. The *Protuberantiæ Orbiculares*; i. e. The *Nates* and *Teſtes* in our *Pygmie* were the ſame as in *Man*; whereas in *Brutes* (as Dr. *Willis* well obſerves) the *Nates* are always proportionably larger than in *Man*; but it was not ſo in our *Pygmie*. The *Valvula major* here was very plain. The *Cerebellum* being divided, the *Medullary* Parts repreſented the Branches of Trees, as a *Man*'s does. The *Medulla Oblongata* and *Medulla Spinalis* the ſame as the *Humane*; and all Parts being ſo conformable here to a *Humane Brain*, I thought it ſufficient juſt to name them, ſince I have cauſed to be made two *figures* of the *Brain* in our *Pygmie* from the Life, and in its Natural Bigneſs, where all the Parts are plainly repreſented to the Eye.

(80) *Willis Cerebri Anat.* cap. 3. p. 22.

I THE

THE OSTEOLOGY, OR DESCRIPTION OF THE BONES.

WE come now to the *Oſteology*, to give a Deſcription of the *Sceleton* of our *Pygmie*, by comparing which, with that of a *Man*, an *Ape* and a *Monkey*, we may obſerve (as we have already of the other Parts) that here too, our *Pygmie* more reſembles a *Man* than *Apes* and *Monkey's* do; but where it differs, there 'tis like the *Ape-kind*. *Galen* (as I have already quoted him, *vid. p.* 15.) tells us that *an Ape of all Creatures is the moſt like to a Man in the* Viſcera, *Muſcles*, *Arteries*, *Veins and Nerves*, *becauſe 'tis ſo in the Structure of the Bones*. But it may be queſtioned, Whether even the Structure of the *Bones* themſelves, does not depend upon that of the *Muſcles*: ſince in their firſt Formation, they are *ſoft* and *vaſcular*; then *Cartilaginous*, and in time at laſt are hardened into *Bones*. In *Ricketty Children* too, we find, that even the *Bones* are rendered crooked, by the Contraction of the *Muſcles*, how much more, when they are tender and ſoft, might they be bended any way by them. But by underſtanding exactly the Structure of the *Bones*, we ſhall the better apprehend the Riſe and Inſertions of the *Muſcles*. And for the better attaining this, *Galen* in the ſame Chaper (81) recommends to his *Students*, when they cannot have an opportunity of Conſulting an *Humane Sceleton*, then to

(81) *Galen. de Anat. adminiſtr.* lib. 1. cap. 3. p. m. 29, 30.

make

make uſe of thoſe of *Apes*; not that he thinks them both alike, but the moſt like: and tells them, that it was worth their while on this account to go to *Alexandria*, where the Phyſicians taught their Scholars the Doctrine of the Bones from the Inſpection of *Humane Sceletons* themſelves, which he much prefers before Books. But ſince in his time *Humane Sceletons* were not to be had but at *Alexandria*, for the ſupplying this Defect, they might obſerve the *Bones* of *Apes*; and after that, they might read his Book *De Oſſium Naturâ*, and to do as he did, viſit the *Sepulchres* and Graves, and to obſerve there the *Humane Bones* themſelves: And he tells us of two *Sceletons* he made uſe of; One that the River had waſhed out of a *Tomb*, where the Fleſh was corrupted and waſhed away, yet the Bones held together. The other was of a Thief that was Executed, who was ſo much hated, that none would bury him; but the Birds pick'd off his Fleſh, and left his *Bones* as a *Sceleton*. But ſaith he, σὺ δὲ εἰ μηδὲ τοιοῦτον μηδὲν εὐτύχησας θεάσασθαι, πίθηκον οὖν ἀνατεμὼν, ἐπ' αὐτοῦ καταν͂όησον ἕκαστον τῶν ὀστῶν ἀκριβῶς, &c. i. e. *If you can't happen to ſee any of theſe, diſſect an Ape, carefully view each Bone*, &c. Then he adviſes what ſort of Apes to make choice of, as moſt reſembling a Man: And concludes, ἁπάντων, ὡς ἔφην, τῶν ὀστῶν καταν͂οῆσαι χρὴ τὴν φύσιν εἴτ' ἐπὶ ἀνθρώπου σώματι, εἴτ' ἐν πιθήκου εἰ δυνηθείης· ἄμεινον δ' ἐπὶ ἀμφοῖν, εἶθ' ἑξῆς ἐπὶ τὴν τῶν μυῶν ἀνατομὴν ἐλθεῖν, i. e. *One ought to know the Structure of all the Bones either in a Humane Body, or in an Ape's; 'tis beſt in both; and then to go to the Anatomy of the Muſcles.*

What *Galen* adviſed, no doubt he practiſed himſelf, and obſerved both. But *Andreas Veſalius* will not allow him this: For in his great and excellent Book *De Corporis Humani Fabricâ*, he all along tell's us, that *Galen* gives us rather the *Anatomy* of *Apes* than of a *Man*: And in his *Epiſtola ad Joachimum Roelants de Radice Chynæ*, his chief Deſign is to prove, that *Galen* never diſſected a *Humane Body*; and that he is often miſtaken in the Hiſtory of the Parts, as alſo in their Uſes; and that his Reaſonings are frequently unconcluſive.

Upon the coming out of *Veſalius* his firſt Book, he was warmly oppoſed by *Jacobus Sylvius* a Phyſician at *Paris*, who had formerly been *Veſalius* his Maſter in *Anatomy*; in a Treatiſe ſtiled *Depulſio Veſani cujuſdam Calumniarum in Hippocratis & Galeni Rem Anatomicam*. This was anſwered not long after by *Renatus Henerus*, who publiſhed another Treatiſe, *viz. Adverſus Jacobi Sylvij Depulſionum Anatomicarum Calumnias pro Andreâ Veſalio Apologia*. *Sylvius* afterwards procures a Diſciple of his to write againſt *Veſalius*, who puts out, but unſucceſsfully, *Apologia pro Galeno contra Andream Veſalium Bruxellenſem, Franciſco Puteo Medico Vercellenſi Authore*. A Scholar of *Veſalius*, *Gabriel Cunæus*, makes a Reply to *Puteus* in his *Apologiæ Franciſci Putei pro Galeno in Anatome examen*. Upon *Veſalius* his leaving *Rome*, a Diſciple of his, *Realdus Columbus*, grew very famous for *Anatomy*, but ungrateful to his Maſter, as *Veſalius*

complains in his Book *De Radice Chynæ*, and his *Examen Obſervationum Falloppij*. But *Gabriel Falloppius* was always kinder to him, and mentions him with the greateſt Honour, and calls him *Divine*; tho' in ſeveral things he diſſents from him, which occaſioned *Veſalius* his putting out his *Obſervationum Falloppij Examen*.

Realdus Columbus was ſucceeded at *Rome* by *Bartholomæus Euſtachius*; a Man very knowing and curious in *Anatomy*, but extreamly devoted to *Galen*, as one may ſee by this Paſſage; *Ut uno verbo me expediam, talem eum eſſe (ſc. Galenum) aſſeverem, qualem opinor neminem in poſterum futurum, fuiſſe nunquam plane confirmo. Quare dubiis in rebus diſſentire ab eo honeſtè non poſſumus, ſed magis expedire, decereque putandum eſt, illo Duce errare, quàm his illiſve Magiſtris hodie erudiri, nè dicam cum iis vera ſentire* (82). Too great a Partiality for ſo ingenious a Man. And it may be, this was one Reaſon why *Veſalius* ſo much endeavoured to leſſen *Galen*'s Authority; becauſe the Humour of the Age was ſuch, that nothing then was to be received, but what was to be met with in him. But certainly they are in the wrong, who, becauſe *Galen* is miſtaken in ſome things, do now wholly reject him, and lay him aſide as good for nothing. The wiſeſt and moſt experienced in the *Art* may read his Works, and in reading him, if juſt and not prejudiced, will acknowledge, a Satisfaction and an Advantage they have received from him.

The Deſign of *Bartholomæus Euſtachius* in writing that Diſcourſe of his, *Oſſium Examen*, is to juſtifie *Galen*, that he did not only diſſect *Apes*, but *Humane Bodies* likewiſe; and that his Deſcriptions are conformable to the Parts in *Man*, and not to *Apes* and *Monkeys*. He therefore draws a Compariſon between the *Sceleton* of an *Ape* and a *Man*; and ſhews wherein they differ; and how far *Galen*'s Deſcriptions of thoſe Parts are different from thoſe in an *Ape*. *Volcherus Coiter* has likewiſe made the ſame *Comparative Survey*, in his *Analogia Oſſium Humanorum, Simiæ & veræ & caudatæ, quæ Cynocephali ſimilis eſt, atque Vulpis*. In moſt things I find *Coiter* to follow *Euſtachius*, but *Euſtachius* I think is to be preferred, becauſe in his *Annotationes de Oſſibus*, he quotes the Texts of *Galen* at large. *Johannes Riolanus* the *Son* hath wrote upon the ſame Argument likewiſe; *viz. Simiæ Oſteologia ſive Oſſium Simiæ & Hominis Comparatio*; and he being later than either of the former, and having made uſe of all before him, he may be thought to be the moſt exact.

In giving therefore an Account of the *Oſteology* of our *Pygmie*, and the better to compare it's *Sceleton* with that of a *Man*, and an *Ape*, and a *Monkey*, I thought I could not do better, than to inſert this Diſcourſe of *Riolanus*; and by *Commenting* upon it, to ſhew wherein our *Pygmie* a-

(82) *Barthol. Euſtachij Oſſium Examen*, p. m. 189.

grees

grees or differs. This I thought the moſt compendious way, and what other Obſervations I have, that conveniently I can't inſert in my *Comment*, I ſhall add at the cloſe of this Diſcourſe. And tho' I may be cenſured by ſome for diſcourſing ſo largely upon an *Ape*, yet this *Apology* I have to make, That 'tis an Argument that has exerciſed the Pens of the greateſt *Anatomiſts* we have had; and ours being one of a higher degree than the Common ſort, and in ſo many Particulars nearer approaching the Structure of *Man*, than any of the *Apekind*, and it being ſo rare and uncommon, it may the more excuſe me, if I endeavour to be as particular as I can. But in ſome meaſure to avoid this Fault, I ſhall omit *Riolan's firſt Chapter*, which is but Præfatory, and begin with *the ſecond*.

CAP. II.

De Capitis & Faciei Oſſibus.

SImiæ *Caput* (a) *rotundum eſt, humano ſimile, cynocephali verò caput oblongius. Utriuſque* (b) Suturæ *adeo ſunt obſcuræ, ut earum nullum appareat veſtigium. Propterea potiùs harmoniæ dici merentur, quam ſuturæ, quia rerum conſutarum figuram non æmulantur. Attamen* Volcherus Coiter *ſuturas attribuit ſimiis, parum ab humanis diſcrepantes. In cercopitheco ſquammiformes deſiderantur.* (c) Frontis Os *in calvariæ baſis ſede, ad conjunctionem Oſſis ſphenoidis, tranſverſâ potius lineâ quàm ſutura diſtinguitur: ampla oblongaque ſciſſura homines diviſum obtinent, in quam aliud Os inſtar cribri perforatum conjicitur, arctiſſimeque conſtringitur. At* (d) Simiæ Os Frontale *ea in parte omnino continuum exiſtit, & quâ naſus principium ſumit, non longè ab ea ſede, quæ frontem conſtituit, alto & rotundo foramine parumper à lateribus compreſſo, illo foramine quod nervum viſorium emittit, nonnihil ampliori, excavatum eſt. In ejus humiliori profundiorique ſede, quatuor aut quinque alia foramina recta & lata cernuntur. In ſimia caudata* (e) Os Ethmoides *admodum profundè in nares deſcendit, paulò infra eam regionem ex qua naſus exoritur. Harmoniâ per medium dividitur, & utrimque ab Oſſe frontis, quod etiam profundè deſcendit effingi videtur.* (f) Superficies ſellæ Sphenoidis *ad narium principium in Oſſe frontis non eſt plana & æqualis ut in homine, ſed eſt eminentiſſima. In poſteriori ſellæ eminentia glandulam excipiente, reperitur foramen exſculptum. In ſellæ* (g) *hujus ſubſtantia nulla latet cavitas ut homine.* (h) Cavitates illæ *quæ in apophyſibus pterygoideis exſculptæ ſunt, maximæ & profundæ apparent.* (i) Oſſa, Bregmatis, & Temporum, *nec intus, nec foris, ullam demonſtrant diviſionem, quaſi ex unico continuatoque Oſſe conſtarent.* (k) *In Oſſe temporum apophyſis* Maſtoidis *deeſt*, Styloidis *exigua eſt.* (l) *Cavitas auris videtur unica, orbiculatim in plures gyros ſtriata, nec tria Oſſicula Malleolus, Incus, & Stapes reperiuntur, quibus aliorum animantium aures inſtructæ ſunt, ſi credimus* Caſſerio, *ſed ego ſemper obſervavi.*

Os

Os Zygωma (m), *quâ parte ab Oſſe orbitario procedit, craſſum & robuſtum eſt, atque ejus in medium lineâ potiùs quàm ſuturâ diſtinguitur. In homine verò tenue exiſtit, & ſuturâ dirimitur.*

Simiæ Facies (n) *rotunda eſt, cynocephali oblonga & antrorſum protuberans. Oſſa verò* Maxillæ ſuperioris *reſpondent humanis.* (o) *Suturæ ſunt harmoniis, ſive rimis ſimiles, potiſſimum ea quæ medium palatum interſecat. Sed peculiaris ſutura notatur, ab inferiore orbita incipiens, ſecundum longitudinem maxillæ ad caninum dentem cujuſque lateris prorepit, ipſumque palatum dirimit.*

Maxilla inferior (p) *integra eſt, nullâ lineâ in mento diſſectâ, breviſſima eſt corporis proportione, ita ut ex omni animantium genere nullum breviorem habeat, excepto homine. Extremitas quæ cavitati temporum articulatur, eſt condyloïdis, ut in homine. Quare non eſt gynglymoides hæc articulatio, ut ſcripſit* Volcherus Coiter.

(q) *Simia in* dentibus *caninis & molaribus differt ab homine.* Caninos *quidem habet* dentes *humanis ſimiles, in unaquaque maxilla binos, qui utrimque aſſident & accumbunt inciſoribus. Singulas radices ut inciſores habent, ſed altiùs infixas robuſtioreſque, minùs etiam ex anteriore parte, quàm poſteriore preſſas & anguſtas. Ac ſimia cynocephalos dentes caninos longiores prominentioreſque, quàm vera ſimia obtinet.* Molarium dentium numerus *in homine incertus eſt, authore* Galeno: *ſæpius enim in utraque maxilla ſunt ſexdecim, interdum viginti, nonnunquam viginti quatuor.* At ſimiæ ſemper certus ac definitus molarium numerus. *Differunt quoque* Maxillares *ſimiæ ab humanis, in figura externa, & radicum numero, quamvis enim priores duo molares ſimiæ, ab humanis, aut nihil, aut certè parum diſcrepent, quia in ſimia primus inferior unum tantùm apicem obtinet: Attamen in poſteriorum dentium menſis, ſecundum longitudinem maxillarum, profunda admodum linea exſculpta eſt. Quam lineam altera etiam tranſverſa, quæ in quinto dente ſimiæ non caudatæ gemina eſt, intrinſecus & extrinſecus ad gingivam uſque protracta interſecat. Quo fit, ut ſinguli ejuſmodi dentes eminentias, ut plurimum quatuor in angulis (nam quinto ſex ſunt) tres verò foveas in medio habentes, duarum ſerrarum mutuò ſibi occurrentium modo committantur: quod profectò accuratiſſimus Author* Galenus *explicare minimè prætermiſiſſet, ſi molares ſimiarum deſcripſiſſet.*

Os Hyoides (r) *humano firmè ſimillimum exiſtit, præterquam quod medium ipſius oſſiculum amplius eſt, quàm in homine, & poſteriore ſede inſigniorem oſtendit cavitatem, gibbis ipſius laryngis partibus invehitur, ſitque propugnaculum cartilaginis ſcutiformis. In illa enim lata oblongaque apophyſi, interiores partes Oſſis hyoidis efformat, quæ deorſum adeo producitur, ut inſtar clypei cartilagini thyroidi obtendatur.*

(a) The

(*a*) The *Cranium* of our *Pygmie* was round and globous, and it ſeemed to be three times as big as the Head of a Common *Monkey*; for, that I might the better compare them, I procured the *Sceleton* of a *Monkey*, which I found was exactly the length of that of our *Pygmie*: though at the ſame time we ſhall ſee, that in ſeveral of the Parts, 'twas vaſtly different. For meaſuring the Head of our *Pygmie* by a Line drawn round from the Noſe, over the *Orbit* of the Eyes, to the *Occiput* or hinder part of the Head, and ſo to the Noſe again, I obſerved 'twas Thirteen Inches. The *Cranium* of the *Monkey* meaſured there only Nine Inches and a quarter. The girth of the Head of the *Pygmie*, from the *Vertix* round by the Ears to the *Vertix* again, was Eleven Inches and an half: in the *Monkey* 'twas only Seven Inches and an half. The longitudinal *Diameter* of the *Cranium* of the *Pygmie* was Four Inches; of the *Monkey* Two Inches and a quarter. The latitudinal *Diameter* of the *Cranium* of the *Pygmie* was Three Inches and above a quarter; of the *Monkey* a little above Two Inches. The profundity of the *Cranium* of the *Pygmie*, from the *Vertix* to the *Foramen* where the *Medulla Spinalis* paſſes out, was about Three Inches and a quarter; in the *Monkey* Two Inches. So that in the largeneſs of the *Cranium*, the *Pygmie* much exceeds the *Monkey*, as alſo *Apes*, and more reſembles a *Man*.

(*b*) The *Sutures* in our *Pygmie* perfectly reſembled thoſe in an *Humane Cranium*; The *Sutura Coronalis*, *Sagittalis*, and *Lambdoides* being all *ſerrated* or *indented* very curiouſly, as in *Man*. In the *Lambdoidal Suture* I obſerved Nine *Oſſa triquetra Wormiana*. In the *Cranium* of a *Monkey* I found the *Coronary Suture* for the moſt part to be *Harmonia*, and only for a little ſpace to be *ſerrated* towards the middle, where it meets the *Sagittal Suture*. The *Sagittal Suture* here was indented throughout. The *Lambdoidal Suture*, as extended from the *Sagittal* of each ſide for about half an Inch, was *ſerrated*; then the *Suture* diſappeared, and there was formed here a riſing ridge of the *Cranium*, which was continued to that *Apophyſis* which makes the hinder part of the *Os Zygomaticum*. There was no ſuch bony ridge in the *Cranium* of the *Pygmie*. In the *Monkey* too I ſaw the *Squammous Sutures* very plain, tho' *Riolan* denies them; which likewiſe in our *Pygmie* was very apparent. Our *Pygmie* therefore in the Structure of the *Sutures* exactly reſembled a *Humane Cranium*, and more than *Apes* and *Monkeys* do: For in them the *Coronary* and *Lambdoidal Sutures* were only in part *ſerrated*; and they had no *Oſſa triquetra Wormiana*.

(*c*) In our *Pygmie* there was an *Os Cribriforme*, as in *Man*; 'twas about half an Inch long, and a quarter of an Inch broad; in it I numbred about Thirty *Foramina*; here was likewiſe that long ridge, (which is call'd *Criſta Galli*) as in a *Man*, to which the *Dura Mater* was faſtened.

(*d*) In

(*d*) In the *Cranium* of the *Monkey* there was no *Criſta Galli*; and where the *Os Cribriforme* ſhould have been, there was a hollow Paſſage which led towards the beginning of the Noſtrils, at the end of which there might be a ſmall *Os Cribriforme* perforated with four or five holes. But this Part appeared very different from the Structure of a *Humane Skull*, as likewiſe from our *Pygmie*; which was occaſioned chiefly by the great bunching in of the Bones of the Orbit of the Eye, tho' our *Pygmie* too had theſe Bones more protruded in, than they are in a *Humane Cranium*.

(*e*) This appeared more in the *Cranium* of a *Monkey* than in our *Pygmie*; tho' here too 'twas ſomewhat more than in a *Man*'s *Skull*.

(*f*) The *Sella Equina* in our *Pygmie* was exactly like a *Man*'s. In a *Monkey* I obſerved it more riſing and higher. In the middle of the *Sella Turcica ſeu Equina* of our *Pygmie*, I obſerved a *Foramen*; and the ſame I found in a *Humane Cranium* I have by me.

(*g*) In our *Pygmie* I did not obſerve thoſe two *Cavities* under the *Sella Turcica* which are to be met with in a *Humane Skull*. But the Bone here was very ſpungy and cavernous, and might anſwer the ſame end, tho' not formed perfectly alike.

(*h*) Theſe Cavities in our *Pygmie*, were nothing ſo large as they are in a *Monkey*, but conformable to the Structure of this Part in an *Humane Skull*. And in our *Pygmie* too, I obſerved the *Pterigoidal Proceſſes* as they are in *Man*, but I did not find them in the *Monkey*.

(*i*) The *Oſſa Bragmatis* and *Temporum* in our *Pygmie* were very plainly diſtinguiſhed by an *indented Suture*. In the *Cranium* of the *Monkey* theſe Bones were divided by a *lineal Suture* call'd *Harmonia*.

(*k*) The *Maſtoid* and *Styloforme Proceſs* in our *Pygmie* were very little, yet more than in the *Monkey*; but herein our *Pygmie* rather imitates the *Ape-kind*.

(*l*) Becauſe I would not ſpoil the *Sceleton*, I did not examin the Organ of the *Inward Ear*: But am wholly inclined to *Riolan*, who tells us he always found thoſe Three little Bones, the *Malleolus*, *Incus*, and *Stapes* there; and no doubt but they are to be met with in our *Pygmie*. Tho' *Caſſerius* therefore thinks *Galen* does not mention them, and never obſerved them, becauſe they are not to be found in *Apes*: But *Riolan* tells us the contrary.

(*m*) The *Os Zygomaticum* in our *Pygmie* was not half ſo big or large as in the *Cranium* of the *Monkey*; herein therefore our *Pygmie* more reſembles a *Man*.

(*n*) Tho'

(*n*) Tho' the Face of our *Pygmie* was rounder than an *Ape*'s, as that is than a *Monkey*, and a *Monkey*'s more than the *Cynocephalus*, yet 'twas not altogether so much as a *Man*'s; the upper Jaw being proportionably longer and somewhat more protuberant. The Bones of the *Nose* too in our *Pygmie* more resembled the *Ape-kind*, than the *Humane*, being flat and *simous*; hence *simia*; and not protuberant and rising as in Man.

(*o*) The *Suture* of the *Palate* in our *Pygmie* was just the same as in a *Man*. In a *Monkey* I observed that *peculiar Suture Riolan* mentions, but did not find it in the *Pygmie*: Only in the *Palate* of the *Pygmie* I observed a *Suture*, not from the *Dens Caninus*, as was in the *Monkey*, but from the Second of the *Dentes Incisores*.

(*p*) In our *Pygmie* the under Jaw was perfectly closed at the *Mentum*, as 'twas in the *Monkey*; and 'tis so in a *Man*. *Galen* (83) tells us, Ἁπάντων γὰρ τῶν ζώων ἄνθρωπος ἔχει βραχυτάτην τὴν γένην, ὡς πρὸς τὴν ἀναλογίαν δηλονότι τοῦ παντὸς σώματος· εἶθ' ἑξῆς ἀνθρώπῳ πίθηκος, εἶτα λύγκες, καὶ σάτυροι, κἄπειθ' ἑξῆς κυνοκέφαλοι. i. e. *That of all Animals a Man hath the shortest Chin, or under Jaw, in proportion to his Body; then next to a Man, an* Ape, *then a* Lynx, *then* Satyrs, *and after these the* Cynocephali. And I may add, of all *Apes*, our *Pygmie* hath the shortest. The Articulation of the under Jaw in our *Pygmie* was *Condyloides*, as 'tis in *Man*; and not *Gynglymoides*, as *Volcherus Coiter* and *Barthol. Eustachius* observe.

(*q*) Our *Pygmie* had in each Jaw before, four *Dentes Incisores*; then following them, of each side a *Dens Caninus*; then after them of each side, Four *Dentes Molares*, in all Fourteen Teeth in each Jaw, in both Twenty eight. But our Subject being young, I observed that all the *Teeth* were not perfectly grown out of the Jaw-bone, and could perceive some of the *Molares*, that still lay hid there, or were not much exerted. In a *Monkey* in each Jaw there were two *Dentes Incisores* before; then four *Dentes Canini*, two of each side; then eight *Dentes Molares*, four of each side. The Number of the Teeth in each Jaw, and in the whole the same as in the *Pygmie*: only the *Monkey* had four *Dentes Canini* in each Jaw, the *Pygmie* had but two, as in a *Man*: Or at least in the *Monkey*, the two first of the *Canini* seemed to be Amphibious, between an *Incisor* and *Caninus*; being not so broad as the two first *Incisores*, nor so much exerted or extended as the two other *Canini* were. In the number of the *Teeth* our *Pygmie* imitated more the *Ape-kind* than the *Humane*: But in the Structure of them, more the *Humane* than the *Ape-kind*; for the *Mensa* or *Superficies* of the *Molares*, was not so *serrated* as the *Monkey's*, but liker *Humane Teeth*.

I have omitted the Printing the next *Paragraph* in *Riolan*, because I

(83) *Galen de Anat. Administr.* lib. 4. cap. 3. p. 94.

would not be tedious : And for the ſame reaſon, do not here particularly deſcribe each Bone in the Head and Jaws of our *Pygmie* ; for where I do not remark otherwiſe, 'tis to be underſtood, that all thoſe Parts are the ſame in a *Man*, our *Pygmie* and the *Ape-kind*.

(r) There was nothing particular that I obſerved in the *Os Hyoides* of our *Pygmie* that was different from that of a *Man*'s.

CAP. III.

De Spina & Oſſibus & Adnexis.

SIMIÆ (a) Cervix *brevis eſt, ſeptem vertebris extructa, corpora vertebrarum anteriori parte non ſunt rotunda ut homini, ſed plana. Poſticæ apophyſes ſpinoſæ non ſunt longæ, & bifidæ, ſed breves, ſimplices, & acutæ.* In prima (b) *vertebra, nullum ſpinæ veſtigium apparet, imò nulla ſentitur aſperitas, in anteriore parte corporis primæ vertebræ humanæ obtuſa quædam eminentia apparet, quæ in ſimia magis extuberat, & in mucronem producitur. Quod ſi vertebras & ſpinas breves habet ſimia,* (c) *apophyſes tranſverſas obtinuit longiores, atque ad anteriora magis, quàm in homine reflexas. Imprimis verò ſexta colli vertebra, quæ hunc proceſſum præ cæteris inſignem adepta eſt, eumque bifidum, magiſque recurvum & aduncum, quàm in aliis vertebris. Hic autem ſpondylus ſextus maximus eſt, propter illas tranſverſas apophyſes grandiores, in ſimia caudata minor eſt. Septimi ſpondyli tranſverſæ apophyſes ſimplices & tenues, in caudata ſimia bifidæ, & ſatis longæ exiſtunt, quæ licet in homine ſimplices appareant, ſexto tamen craſſitie non cedunt.*

(d) *Prima ſimiæ vertebra ad finem proceſſus tranſverſi aſcendentis utrimque foramen habet, ad nervum tranſmittendum, quo humana caret vertebra, ſeptima colli vertebra in homine ſæpius eſt perforata : Unde evenit, quod tranſverſi proceſſus hujus vertebræ non ſunt ſimiles apophyſibus tranverſis colli, ſed potiùs thoracis apophyſibus tranſverſis aſſimilantur.* (e) Vertebrarum dorſi *corpora parum ab humanis differunt, neque apophyſes multùm diſſimiles ſunt, exceptis rectis ultimarum duarum vertebrarum, quæ rectiores ſunt in ſimiis, paulùm deorſum inclinat in hominibus. In* (f) *poſtremis vertebris dorſi reperiuntur quatuor infernæ apophyſes articuli gratiâ conſtructæ. In humanis vertebris duæ tantùm notantur, quas etiam in lumborum vertebris obſervabis.* (g) *In ſimia decima dorſi vertebra, infra ſuprave ſuſcipitur, at in homine eſt duodecima.*

(h) *Lumbi,*

(h) *Lumbi, inquit* Galenus, *in ſimiis ſunt longiores quàm in hominibus, ſi pro ratione reliquarum partium hoc æſtimare velis, nam in homine quinque vertebræ lumbos efformant, in ſimiis non ſecus, quàm in aliis quadrupedibus ſex adſunt.* (i) *Harum vertebrarum proceſſus ab humanis differunt. Siquidem tranſverſi in homine teretes ſunt & oblongi, nonnihil in exteriora converſi, coſtularum vicem gerentes. In ſimia ſunt ampli, intrò ſpectantes, & inſtar ſquammæ tenues: figurâ caudam hirundinis referunt, aut cornu retortum, quod oblongo acutoque mucrone erigitur, ac ſurſum vergit. Ac tertia lumbi vertebra primò incepit tranſverſum conſequi proceſſum, qui brevis eſt. Reliqui ſubſequentes longiores exiſtunt.* (k) *Poſteriores proceſſus ſpinoſi non ſunt recti, ſed ſupernè ſpectant, atque excipiuntur à ſupernis incumbentibus vertebris, quæ hiatu ſive ſciſſura triangulari inter duos tranſverſales proceſſus exiſtente, dum in poſteriora ſimia ſpinam inflectit, eoſdem tranſverſales excipiunt.*

(l) *Obſervandum venit in homine circa radices infernas tranſverſarum apophyſeon lumbarium, atque etiam duarum infirmarum thoracis, quædam tubercula magnitudine figuraque meſpilorum nucleos referentia ſæpius reperiri, quæ cum in canibus & ſimiis non habeantur, ſuſpicari poſſet aliquis vicem illarum quas paulò antè deſcripſi proceritatum in homine tenere.*

(m) Os Sacrum *ſpinæ fundamentum in homine, ex tribus vertebris conflatur: In ſimiis ex duabus tantum componitur, quibus ilium Oſſa copulantur.*

(n) *Simiæ longior eſt* Coccyx, *quàm homini, pluribus ideo conſtructus Oſſibus, quæ juxta commiſſuram Oſſis Sacri perforata ſunt, medullamque continent, atque nervos antrorſum & retrorſum emittunt, quæ omnia deſunt in coccyge hominis: cur autem ſimia vero coccyge caruerit, rationem reddit* Fallopius, in Obſervat. Anatomicis.

(o) *Homo, inquit* Galenus, *ex omnibus animalibus* Coſtas *curviſſimas habet, propterea latiſſimum pectus obtinuit. Simiæ latius cæteris pectus datum, ſed humano anguſtius.*

(p) *Porro ſimia, tam caudata, quàm non caudata, coſtas viginti ſex præ ſe fert, cum in homine tantùm viginti quatuor reperiantur. Harum utrimque ſunt octo veræ coſtæ, in homine ſeptem, quæ per articulum ſterno committuntur. Quinque vero nothæ coſtæ non deſinunt in perfectam cartilaginem verſus ſternum invicem conſtrictæ, ut in homine, ſed oſſeæ magis quàm cartilaginoſæ, à ſe mutuò diſjunguntur.* Coſtæ *in ſimia, tam caudata, quàm non caudata, ſpatiis vertebrarum intermediis inſeruntur: at in hominibus magis corporibus vertebrarum attexuntur.*

(q) Sternum *octo conſtat Oſſibus rotundis, quorum primum aliquantiſper prominet, ſupra cartilaginum duarum primarum conjunctionem, quæ duæ cartilagines videntur amplexari ſuperiore parte primum os ſterni. Cartilagines*

coſtarum commiſſuris Oſſium ſterni accreſcunt, duæ ultimæ concurrunt ſimul in articulationem ultimi & penultimi oſſis ſterni. Ultimum os ſterni xiphoidem cartilaginem referens, impensè longum eſt, & teres.

(r) *Simia quoad ſcapulas & claviculas homini maximè ſimilis eſt, authore* Galeno. *Clavicula incipiens à primo ſterni oſſe ad medium coſtæ rectà procedit, inde ad acromion uſque multùm curvata intumeſcit: huic articulationi interjectum eſt oſſiculum, quod in homine ad decimum octavum annum & ultrà, appendix exiſtit: at in ſimia, nec iſtud oſſiculum, nec illius veſtigium ullum apparet, imò pars illa robuſtiſſima eſt.*

(a) In our *Pygmie* there were ſeven *Vertebræ* of the Neck, as there are in a *Man*, and an *Ape* too; but they were ſhort, making in length about two Inches; and ſeemed more to imitate thoſe in *Apes*, being flatter before, and not ſo round as in *Man*. And their *Spines*, tho' they were longer, and more obtuſe, and not ſo acute as in *Monkeys*; yet they were not *biſide*, as they are in *Man*.

(b) In the firſt *Vertebra* of the Neck in the *Pygmie* there was no *Spine*, but an Aſperity; in a *Man* there is a *ſmall Spine*. And before, 'twas like to the *Humane*, having an Obtuſe Eminence, and not running to a *Mucro*, as in the *Ape* and *Monkey*. The *Dens* of the ſecond *Vertebra* in the *Pygmie* was partly *Cartilaginous*.

(c) I did not obſerve in the *Pygmie* the *Tranſverſe Apophyſes* to be longer, nor to be reflected more forward, nor the *ſixth Vertebra* to be larger than the others; nor the *ſeventh Vertebra*, to be any thing different from the ſame in *Man*; but in all theſe Circumſtances, our *Pygmie* ſeemed to imitate the Structure of the ſame Parts in *Man*, more than does the *Ape-kind*.

(d) Thoſe *Foramina* obſerved in the *Vertebræ* of the Neck of *Apes*, were wanting in our *Pygmie*, who herein imitated the *Humane Sceleton*.

(e) I did not obſerve any difference between the *Vertebræ* of the *Back* of our *Pygmie* and thoſe of a *Man*'s; nor what *Riolan* remarks of the *Apophyſes rectæ* of the two laſt *Vertebræ*.

(f) In the lower *Vertebræ* of the Back of the *Pygmie*, I obſerved but two *Apophyſes infernæ*, as 'tis in a *Humane Sceleton:* in a *Monkey* there are four *Apophyſes* there.

(g) Our *Pygmie* if *Riolan*'s account be true, is different both from the *Ape* and *Man* too; for here 'twas the thirteenth *Vertebra*, *quæ infra, ſuprave ſuſcipitur*.

(h) The

(*h*) The *Vertebræ* of the *Loins* in our *Pygmie* were about two Inches long; and their number the ſame, as in a *Man*, *viz.* five; and not ſix, as are in *Apes* and *Monkeys*: But the *Os Ilium* of each ſide does aſcend ſo high, as to include the two lower *Vertebræ*; which is not ſo in *Man*.

(*i*) The *Tranſverſe Proceſſes* of the *Lumbal Vertebræ* in the *Pygmie*, were round and thick, as in *Man*; and not thin and flat, or broad, as in the *Monkey*.

(*k*) The *Spines* of the *Lumbal Vertebræ* in the *Pygmie*, were ſtrait, as in a *Man*; and not bending upwards, as in the *Ape* and *Monkey-kind*.

(*l*) I am apt to think theſe *Tubercula* are in our *Pygmie*; but our Subject being young, and ſeveral of the Parts not yet hardened into *Bones*, but *Cartilaginous*; I was not fully ſatisfied herein, and do leave it as a *Quære*.

(*m*) *Riolan* in this account is miſtaken, nor is he here conſiſtent with himſelf, as to what he writes of this part in other places. *Joh. Philip. Ingraſſias* (84) who has wrote a moſt learned and incomparable *Comment* upon *Galen*'s Book *de Oſſibus*, tells us; *Amplum Sacrumve Os in Homine ſex vel ad minus quinque ex Oſſibus conſtat.* Galenus *tamen, Simiarum Canumve Sceletos diſſecans, interdum quatuor ex Oſſibus componi inquit. Sub Oſſe inquam Sacro largiùs ſumpto, Coccygem quoque comprehendens: (quem Coccygem pro uno Oſſe, ut in præſenti textu facit, tanquam quartum adjungens aſſumpſit, à Sacro interim diſtinguens) ſæpius autem tribus duntaxat propriè ſumptum Os Sacrum à Coccyge diſtinctum expreſſit, uti nunc etiam facit: unde tribus ex partibus conſtructum eſſe ait, tanquam ex propriis Vertebris.* So *Falloppius* and others do make the *Os Sacrum* in a *Man* to conſiſt of ſix Bones, ſometimes five. In our *Pygmie* the *Os Sacrum* was compoſed of five Bones: But in the *Sceleton* of a *Monkey* I obſerved but three Bones or *Vertebræ* which did make up the *Os Sacrum*.

But as our *Pygmie* in the number of the *Vertebræ* which compoſes the *Os Sacrum*, did imitate the *Humane kind*; ſo in other reſpects 'twas much liker to the *Sceleton* of *Apes* and *Monkeys*: For the *Os Sacrum* here, was nothing ſo dilated and ſpread, as 'tis in *Man*; but contracted and narrow as 'tis in *Apes*; and very remarkably different from the *Humane Sceleton*; as 'twas likewiſe in the *Spines* and *Proceſſes* which more reſembled the *Ape-kind*.

(*n*) The *Os Coccygis* in our *Pygmie* conſiſted of four Bones, as 'tis in an *Humane Sceleton*, and theſe not perforated. In the *Ape*, and eſpecially in the

(84) *Comment. in Galen. de Oſſibus*, Cap. x. Text. 3. pag. m. 184.

Monkey,

Monkey, there are more Bones, and thoſe perforated, as *Riolan* deſcribes them. Hence *Julius Pollux* ſtiles it, ὁ τρητὸς κόκκυξ, *Perforatus Coccyx*. This *Os Coccygis* makes a little bunching out of the Skin in the *Pygmie*, as I have repreſented it in my *ſecond figure*, and is remark'd before (*vide pag.*14.)but in *Man*,'tis not protuberant. What *Riolan* obſerves out of the *Nubian Geography*, of a Nation in the Iſle of *Namaneg*, having Tails, I think is fabulous; unleſs they be *Monkeys*, or of that kind: I am certain that Story of the *Kentiſh Longtails* he mentions, is utterly falſe, tho' he modeſtly expreſſes himſelf, *fabuloſum puto*. His words are theſe: *In Inſula Namaneg Maris Orientalis, Gens eſt caudata*, ex Geographiâ Arabicâ Nubienſi, pag. 70. *fabuloſum puto quod de Anglis Caudatis referunt Hiſtorici, quibus ob injuriam* D. Thomæ Cantuarienſi *illatam, Deus Coccygem inſtar Caudæ produxit* (85).

(o) In our *Pygmie* the *Ribs* were altogether as much curved, as in an *Humane Sceleton*; and it was as full *cheſted* as a *Man*.

(p) In the number of the *Ribs* our *Pygmie* imitated the *Ape-kind*: for it had thirteen of a ſide, ſix and twenty in all: In a *Man* there is but twenty four, tho' ſometimes there has been obſerved thirteen of a ſide. As to the other Particulars that *Riolan* mentions, *viz.* the number of the *Coſtæ veræ*, and the oſſious Extreams of the *Nothæ*, and the Articulation of the *Ribs*, herein our *Pygmie* more reſembled a *Man*: for it had but ſeven *Coſtæ veræ* that were articulated to the *Sternum*; and the Extreams of the *Nothæ* were *Cartilaginous*, not *Oſſious*, and continued to the *Sternum* as in an *Humane Sceleton*; and the Articulation of the *Ribs* was more on the Body of the *Vertebræ*, than in the *Interſtices*. *Drelincourt* is miſtaken in mentioning but twelve *Ribs* in the *Ape*, of a ſide, or his was different.

(q) *Jo. Philippus Ingraſſias* (86) makes eight Bones in the *Sternum* of Infants; and tells us, that in time theſe Bones do coaleſce, and grow fewer. *Galen* makes ſeven Bones in the *Sternum*, according to the number of the *Coſtæ veræ* that inſert their *Cartilages* into them. But the eighth Bone *Ingraſſias* ſaith, is for the *Cartilago Enſiformis*. In the *Sternum* of our *Pygmie* I numbred ſeven Bones, the two laſt being ſmall and partly *Cartilaginous*; and here the *Cartilages* were inſerted at the Commiſſures and Joynings of the Bones of the *Sternum*. The *Cartilago Enſiformis* was long and roundiſh. The whole of the *Sternum* of our *Pygmie* much more reſembled the *Humane Sceleton*, than the *Monkey*'s, being much broader and larger, and as far as I obſerved juſt alike.

(r) The *Scapula* of our *Pygmie*, tho' in moſt reſpects it reſembled a *Man*'s, yet I thought it did not ſo much, as a *Monkey*'s; for it ſeemed

(85) *Riolan. Encheirid. Anat.* lib. 6. cap. 16. p. 451. (86) *Jo. Phil. Ingraſſias Comment. in Galen. de Oſſibus*, Cap. 12. Text. 1. pag. m. 190.

narrower,

narrower, and the *Baſis* was proportionably longer. But this I ſuppoſe might happen in preparing the *Sceleton* by paring away the *Cartilages* (for the Creature was young) which in a longer time would have hardened into a Bone. So likewiſe that *Proceſs* which receives the *Clavicula* call'd *Acromion*, was *Cartilaginous*, as was likewiſe the End of the *Proceſſus Coracoides*, and of the *Cervix* it ſelf, which laſt received the head of the *Shoulder Bone*. So that as yet there was not a *Sinus* formed here for the receiving it; but that Extream was flatter than uſually and plain; nor was there that *Sinus* under the *Spine*, as in an adult *Humane Scapula*.

I obſerved no difference in the Figure and Structure of the *Clavicula* in our *Pygmie* and in a *Man*. Nor did I obſerve that Bone *Riolan* mentions, but a large *Cartilage* which did conjoyn that Extream of the *Clavicula* to the *Acromium*, which in time might become long; this *Cartilage* was about a quarter of an Inch long.

CAP. IV.

De Artubus Superioribus.

(a) SIMIÆ & *Hominis* Omoplatæ *omnino ſimiles ſunt.*

(b) Humerus *ſimiæ non admodum ab humano differt, in caudata diſſimilis eſt juxta inferius caput, quod cubito articulatur. Hac enim regione reflectitur ab exteriori parte introrſum, atque in illa flexura canaliculum acquirit ex oppoſito latere pervium.*

(c) Cubiti Oſſa duo *in utraque ſimia humanis reſpondent.*

(d) Carpus *ſimiæ non valde differt ab humano, obtinuit tamen nonum os, de quo ſic loquitur* Euſtachius: *Hoc oſſiculum non in prima brachialis acie eſt locatum, ſed tertio ejuſdem aciei oſſi incumbit, atque inter ea quæ indicem & medium digitum ſuſtinent ſeipſum inſerit: vocatur à* Galeno διῤῥές, *hoc oſſe videntur carere ſimiæ caudatæ, ſed ejus loco adipiſcuntur os peculiare, quod carpi oſſi cubito ſubſtrato annectitur, & ſatis longè protuberat. Deinde inſtar cornicis verſus manus volam incurvatur, atque cum proceſſu oſſis carpi radio articulati, magnam cavitatem muſculorum tendinibus efformat.*

(e) Metacarpij, Digitorumque Oſſa *ſimiæ, tam caudatæ quàm non caudatæ, parum admodum ab humanis oſſibus diſcrepant. Simia quidem magnum manus digitum* Pollicem, *mutilum obtinet, & curtum, & indici propinquum, non oppoſitum, inſtar alterius manus, ut in homine: Reliqui digiti multò ſunt minores digitis pedum.*

(*a*) I have already mentioned that the *Scapula* or *Omoplata* in our *Pygmie* did not ſeem ſo like a *Man*'s, as a *Monkey*'s did; nor does it appear ſo in my *figure*; not but that I think 'tis ſo, when adult; and it's *Cartilages* are hardened into a Bone: but my *figure* only repreſents what was now formed into a *Bone*, and without the *Cartilages*, which in time would have become bony.

(*b*) The *Os Humeri* in our *Pygmie* was a little above five Inches long, juſt the ſame length with the *Thigh Bone*, and not altogether ſo thick. That end which was joined to the Bones of the *Cubit*, was about an Inch and a half broad. I obſerved here, upon the flexure of the *Cubit* forwards, that in the *Os Humeri* there was a deep *ſinus*, and the Bone ſo thin here, that it would admit the Rays of Light thorough; but 'twas not pervious as *Riolan* ſaith it is in a *Monkey*; nor did I obſerve it ſo, in the *Sceleton* of a *Monkey*.

(*c*) In the *Pygmie* the Bones of the *Cubit* were exactly like a *Man*'s. The *Ulna* was five Inches long; the *Radius* five Inches and an half. They had large *Cartilages* at both Extreams.

(*d*) So likewiſe the Bones of the *Carpus* in the *Pygmie* reſembled thoſe of a *Man*. I did not obſerve here that *ninth Bone* deſcribed by *Euſtachius*. For indeed in our Subject, there were but four in each *Carpus*, that were *oſſified*: the others were only *Cartilaginous*.

(*e*) In the *Hand*, our *Pygmie* reſembled the *Ape* and *Monkey*-kind. For tho' the Bones of the *Metacarp* and *Fingers* were like to thoſe of a *Man*; yet the *Thumb* was much ſmaller, than the other Fingers, and ſhorter, and liker the *Ape-kind*. This *Galen* frequently takes notice of. 'Tis true, the other *Fingers* were much larger in our *Pygmie* than in the *Ape-kind*, and more reſembling thoſe of a *Man*, ſo that I was ſurpriſed to ſee them ſo big: but the *Thumb*, which the *Ancients* and *Gallen* call ἀντίχειρα, and *Hippocrates* μέγαν, in our Subject was ſo diſproportionate and little, that as *Galen* remarks (87), any one that ſhould view it, would think that it was but a *ridiculous imitation* of *Man-kind*, and nothing anſwering to it's Names. And in the precedent Chapter he vigorouſly diſputes againſt the *Epicureans* and the Followers of *Aſclepiades*; and from the admirable Structure and wiſe Contrivance of all the Parts, and particularly the *Tendons* that go to the *Fingers*; he confutes their *Hypotheſis* as vain, and hath this noble *Epiphonema*, εἶτ', ὦ πρὸς θεῶν οὐδὲν ἔχοντες ἐν τοσαύταις καταφύσεσι μέμψασθαι, οὔτ' οὖν τὸν ὄγκον τῶν τενόντων, οὔτε τὸν τόπον, οὔτε τὸν τρόπον τῆς ἐμφύσεως, ἀλλ' ἐν ἁπάσαις αὐταῖς θαυμαστὴν ἀναλογίαν ὁρῶντες, μιᾶς μόνης ἀπολλυμένης κατὰ τὸν αὐτὸν τρόπον ἐν ἀμφοτέροις τοῖς μεγάλοις δακτύλοις, καὶ ταύτης οὐκ ἀλό-

(87) *Galen de uſu Partium*, lib. 1. cap. 22. p. m. 310.

γως,

γως, ἀλλ' ὅτι μηδὲν αὐτῆς ἐχρήζομεν, εἰκῇ φάτε, ἐν χωλῆς τέχνης, ἅπαντα τὰ τοιαῦτα γεγονέναι. i. e. *Vos, per Deos immortales, cùm nihil habeatis, quod in tot Inſertionibus reprehendatis, neque Tendonum molem, neque locum, neque Inſertionis modum, ſed in his omnibus mirabilem quandam Proportionem videatis, unâ ſolâ in utroque magno digito ſimiliter perditâ (& hoc non ſine ratione, quod eâ non egebamus) temerè dicitis & abſque Arte omnia hujuſmodi facta fuiſſe.*

The Bones of the *Metacarpus* in the *Pygmie* were an Inch and three quarters long. The two laſt Joints of the *Thumb* were ſcarce an Inch long; the firſt Joint of the *Thumb* was a little above an Inch. The *Fore-finger* was two Inches and almoſt an half: The *middle Finger*, two Inches and three quarters. The third or *Ring-finger* was two Inches and half a quarter; and the *little Finger* was not full two Inches long. The firſt *Joint* of the *fore* and *middle Finger* was above a quarter of an Inch broad, and the Girth of each about was an Inch. The *Pygmie* therefore in the *Fingers*, having them ſo large and thick, imitated a *Man*; but in the *Thumb*, which was ſo ſlender and ſmall, it reſembled the *Ape-kind*.

CAP. V.

De Artubus Inferioribus.

OSSA (a) Ilium *in utraque ſimia, tam caudata quàm non caudata, toto habitu, & figura diſtant ab humanis: debiſcunt enim eo in loco, ubi pubis Oſſa eſſe debebant, atque omnino privantur Oſſe pubis: propterea ad velociter currendum ineptæ ſunt. Iſchij articulus planè diſſimilis eſt ab illo hominis, ut notavit* Galenus.

(b) *Ea eſt* Femoris ſtructura *in ſimia, ut eam ſtare rectam non permittat, nec inſtar hominis corpus ſuum erigere, aut incedere, ne quidem ſedere, quia femoris caput obliquius in articulo coxæ, committitur.* (c) *In homine cervix rotundi capitis femoris oblonga eſt, & ſenſim obliquè deorſum ducitur. In ſimia verò brevis, & propemodum tranſverſa viſitur. Sed femoris cervice, apophyſes duæ, trochanteres dictæ, in ſimia ſimiles ſunt humanis, verum in illa, ut in caudata minores.*

(d) Patella *utriuſque ſimiæ manifeſtum diſcrimen ab humana demonſtrat: eſt enim oblonga, non rotunda. Quamvis autem extrinſecus gibba ſit, atque intus cava, nihilominus longè aliter ſe habet quàm in homine. Nam ſecun-*

dum ipſius longitudinem recurvatur, excavaturque adeo, ut nihil propemodum in medio emineat, curvo aduncoque ejus ſinu naviculam quandam elegantiſſimè referre videatur. In caudata ſimia patella videtur ex duobus Oſſibus mutuò adnatis conſtructa.

(e) Tibiæ utrumque Os *in utraque ſimia humanis Oſſibus ſimillimum eſt.*

(f) Simiæ Pes *ab humano maximè diſcrepat, eſt enim oblongus latuſque homini, anguſtus breviſque ſimiæ, pro ratione corporis, pediſque digiti longiores ſunt, ſed metatarſi Oſſa breviora, calcaneum verò anguſtius, & anteriori in parte qua cum Oſſe cyboide committitur, latius evadens, magiſque inibi longum, quàm retrò, impedit ne ſimia diu erecta, & ſtare, & ambulare queat. Aſtragalus* Galeno *tenuis non efficitur, ſed manens ſublimis, Oſſi ſcaphoidi conjungitur, quod ſimiæ repugnat, in qua aſtragalus humilem, oblongam atque tenuem cervicem habet. Planta in ſimia ex quatuor Oſſibus componitur. Pollex ex tribus, inquit* Euſtachius. *Quamvis* Volcherus *in caudata ſimia nullam obſervarit differentiam, quâ diſcreparent ab homine.* (g) *Digitorum notiſſima eſt diſcrepantia in homine, ut notavit* Galenus, *omnes una ſerie diſponuntur, breviſſimoque ſpatio diſcreti, multo minores ſunt, quàm qui in manu habentur. Nam quantò pes ſumma manu major eſt, tanto illius digiti manus digitis ſunt minores.*

(h) *Accedit quod pollex longitudine indici æqualis eſt, quem dupla craſſitudine ſuperat, taliſque eſt quatuor digitorum commenſuratio, ut ab indice ad minimum ſemper deficiat longitudo : & ſecundæ aciei Oſſa, ſi indicem excepteris, breviora ſunt iis, quæ in tertia phalange reponuntur. Hæc omnia in utraque ſimia aliter ſe habent, omnes enim pedis digiti inſigni ſpatio diſcreti ſunt, multoque longiores, quàm in manu exiſtunt : Pollex cæteris digitis brevior tenuiorque eſt, atque diverſam ab aliis poſitionem ſortitur, dehiſcit etiam, ut pollex in manu valde ab indice. Digiti pedis ſimiæ, manus humanæ digitorum ſeriem imitantur, eſt enim pollex in pede ſimiæ reliquis digitis brevior, inter alios quatuor digitos ut in manu, medius omnium longiſſimus.*

(a) There was no Part I think in the whole *Sceleton* where the *Pygmie* differed more from a *Man*, than in the Structure and Figure of the *Os Ilium* : for in a *Humane Sceleton* thoſe Bones are ſpread broad, forming a *Sinus* or Hollow on the Inſide. In the *Pygmie* they were proportionably longer and narrower, and not ſo *Concave* on the inſide, but in all reſpects conformable to the Shape of the ſame Bones in the *Ape* and *Monkey-kind*. But why *Riolan* ſhould deny the *Os Pubis* to be in *Monkeys*, I ſee no reaſon; for naturally there is not that *Dehiſcence* or Separation of the *Os Pubis*, as *Coiter* has given in his *Figure* of the *Sceleton* of a *Monkey*, and as he deſcribes it; from whence I ſuppoſe *Riolan* borrows this Deſcription : for in the *Sceletons* of two *Monkeys* I obſerved theſe Bones were joined together, and in the *Pygmie* they are cloſed as in a *Man*. When the *Cartilage* that joins them is divided, they will part aſunder;

aſunder; but otherwiſe they are firmly knit together. This therefore is no reaſon, why they ſhould not run faſt: and the contrary was obſerved of the *Pygmie* that it did ſo.

The length of the *Os Ilium*, from it's *Spine* to it's Conjunction with the *Os Iſchium*, was three Inches; where 'twas broadeſt, 'twas an Inch and half; where narroweſt, but three quarters of an Inch. The *Os Iſchium* was an Inch and three quarters long; the *Os Pubis* was an Inch long.

(*b*) I did not obſerve any difference in the Structure of the *Thigh-bone* in our *Pygmie* from that in *Man*; nor was it's *Articulation* or Inſertion of it's Head into the *Acetabulum*, more oblique than in *Man*. So that from this *Articulation*, I ſaw no reaſon why it ſhould not walk upright and ſit; our *Pygmie* did both: When I ſaw it, 'twas juſt a little before it's death; and tho' 'twas weak and feeble, it would ſtand, and go upright.

The length of the *Thigh-bone* in the *Pygmie* was five Inches: The girth of it in the middle an Inch and three quarters; where 'twas joined to the Bones of the *Leg*, 'twas an Inch and almoſt an half broad.

(*c*) The Neck of the Head of the *Thigh-bone* in our *Pygmie* was not different in it's length, as I did obſerve, from that of a *Man*'s, but the ſame proportionably; as were likewiſe the two *Apophyſes*, called *Trochanteres*.

(*d*) The *Patella* in our *Pygmie* was not yet *oſſified*. As much as I could diſcover of it's ſhape, it was the ſame as in *Man*; round and not long; and but one Bone, and not two, as *Riolan* deſcribes it in the *Monkey*. In the *Sceletons* of the *Monkeys* I uſed, theſe Bones were loſt, ſo that I did not obſerve them.

(*e*) The two Bones in the *Leg*, the *Tibia* and the *Fibula* were juſt the ſame in the *Pygmie* as in *Man*; and their Articulations were alike: The *Tibia* was four Inches long; the *Fibula* was a little ſhorter. The girth of the *Tibia* in the middle was about an Inch; of the *Fibula*, about half an Inch.

(*f*) What makes the *foot* of the *Pygmie* ſeem different from a *Man*'s, is chiefly the length of the *Toes*, and the Structure of the *great Toe*. In other reſpects, it has a great reſemblance with it. For the Bones of the *Metatarſus* here, ſeemed proportionably as long as in *Man*. The *Os Calcis*, *Calcaneum* or *Heel-bone* was not narrow, but broad; and forewards, where 'twas joined to the *Os Cuboide* or *Cubiforme*, not broader, nor longer, than behind; where it juts out ſo far, as ſufficiently ſecures it's

ſtanding or walking erect. The *Aſtragalus* I did not obſerve different from a Man's. The *Scaphoides* or *Naviculare* here was *Cartilaginous*. If one reckons three Joints in the *great Toe*, then there can be but four Bones in the *Planta Pedis*, or *Metatarſus*; which with *Euſtachius* I am more inclined to, becauſe really this Part performs upon any occaſion the uſe of an *Hand* too; and the *great Toe*, (like the *Thumb* in the *Hand*) ſtands off from the range of the other Fingers. Beſides, I obſerved a difference in the Colour in the Bones of the *Metatarſus* and the *Toes*: for the Colour of the *Toes* was white and opace; the Colour of the Bones of the *Metatarſus* was like to that of the *Cartilages*, and more tranſparent. Now all the three Bones in the *great Toe* were of the ſame colour, white as were the other *Toes*. Therefore I ſhall make but four Bones in the *Metatarſus*, anſwerable to thoſe of the *Metacarpus* in the *Hand*, and three Bones in the *great Toe*.

(g) And as the *Hand* of our *Pygmie* in ſome Parts reſembled the *Humane*; in others the *Ape-kind*: So the ſame may be ſaid of the *Foot* too. For the *Heel*, the *Tarſus* and *Metatarſus* were like to the *Humane*. But all the *Toes* were liker to the *Ape* and *Monkey-kind*: For the *Toes* here, if we may call them *Toes*, and not rather *Fingers*, were almoſt as long as the *Fingers* in the *Hand*; much longer proportionably than in Man, and not lying ſo cloſe together: But the *Bones* of the *Fingers* in the *Hand*, were larger and bigger than thoſe of the *Toes*.

(h) The *great Toe* in the *Pygmie*, was ſhorter than the firſt of the other Toes; tho' in a *Man* 'tis altogether as long; and herein it reſembles the *Ape-kind*. But whereas *Ariſtotle* (as I have remarked) mentions, that in *Apes* the *middle Toe* is the longeſt, as is the *middle Finger* in the *Hand*; In the *Sceleton* of the *Pygmie* I did obſerve, that the *firſt* and *middle Toe* were both much of a length, each meaſuring an Inch and three quarters: The *third* and *little Toe* were about an Inch and an half long; the *little Toe* being rather ſomewhat ſhorter than the *third Toe*. If in the *great Toe* you reckon three *Articuli*, as *Euſtachius* does, then from the *Tarſus* to it's Extream, the *great Toe* meaſured two Inches and an half: but if with *Coiter* you make but two *Articuli* or *Joints* in the *great Toe*, and the other to be a Bone of the *Metatarſus*; theſe two were only an Inch and a quarter long: The four Bones of the *Metatarſus* were much of a length, being about an Inch and a quarter long.

This *great Toe* (as has been already frequently remarked) being ſet off from the range of the others, more reſembles a *Thumb*. This Difference I obſerve in it's make, That the Bones that compoſe it, are much bigger and larger, than any of the other *Toes*; and in reſpect of the *Thumb* in the *Hand*, vaſtly bigger. In the *Sceleton* of a *Monkey* I did not obſerve the Bones of the *great Toe*, to exceed thoſe of the other. But as the *Thumb* in the *Foot* is much bigger, than that in the *Hand*; ſo the *Fingers* in the *Hand* are much larger than thoſe in the *Foot*. CAP.

CAP. VI.

De Seſamoideis.

IN Homine Oſſa Seſamoidea *pauca ſunt, magnaque ex parte cartilaginoſa, & ſi ea quæ pollici applicantur exceperis, in conſtanti ſede firmata. In ſimia verò multa, atque magna occurrunt, & oſſea perpetuò ſunt. Cuique primo quatuor digitorum internodio, & ſecundo pollicis gemina ferè ſemper adnectuntur. Duo oſſicula magnitudine ciceris, ſupra utrumque tuberculum femoris in origine gemellorum reperiuntur.*

As to the *Oſſa Seſamoidea* in our Subject, I have very little to ſay: For it being young, very likely they might be only *Cartilaginous*, and the Skin adhering ſo firmly here, they might be taken off with it. Since they are in *Apes*, I do not doubt, but that they were in our *Pygmie* too, tho' I did not obſerve them.

Having now made my Remarks upon the *Compariſon*, that *Riolan*, or rather *Euſtachius* and *Coiter*, have given us, between the *Sceleton* of a *Man*, an *Ape*, and a *Monkey*; and ſhewn wherein the *Sceleton* of our *Pygmie* either agreed or diſagreed from any of them, I ſhall make ſome Reflections upon the whole; and more particularly upon ſome Parts, which deſerve here a more diſtinct Conſideration. But ſhall firſt of all take the Dimenſions of the *Sceleton*, and of ſome other Parts I have not mentioned already.

As from the top of the *Cranium* to the Extream of the *Heel* in a ſtrait Line, the *Sceleton* of the *Pygmie* meaſured about two Foot; from the firſt *Vertebra* of the *Neck* to the laſt of the *Os Coccygis*, eleven Inches; from the head of the *Shoulder-bone*, to the end of the *middle Finger*, 'twas about fifteen Inches; the end of this *Finger* reaching in an erect Poſture an Inch and half below the *Patella*: whereas in an *Humane Sceleton*, from the end of the *middle Finger* to the lower part of the *Patella*, it wanted five Inches and an half: Our *Pygmie* therefore herein imitated the *Ape-kind*. From the head of the *Thigh-bone*, to the bottom of the *Os Calcis* in the *Pygmie*, was about ten Inches. From the ſetting on of the firſt *Rib*, to the faſtening on of the laſt, was four Inches. The diſtance between the laſt *Rib*, and the *Spine* of the *Os Ilium*, not full two Inches. From the *Spine* of the *Os Ilium*, to the bottom of the *Os Pubis*, in a ſtrait Line, was four Inches and three quarters. The diſtance between the end of the *Scapula*, and *Spine* of the *Os Ilium* about three Inches.

Both

Both when it was alive, and after it's death, I admired the ſtraitneſs and ſhape of it's *Back*. Now the *Scapula* coming down ſo low on the Ribs, and inclining towards the *Vertebræ* of the Back, and the *Os Ilium* riſing ſo high, they do contribute very much towards it; and muſt alſo afford a great ſafeguard and ſtrength to the *Back* and *Spine*.

The *Sceleton* of our *Pygmie* was juſt the ſame length of one of a *Monkeys* that I borrowed: But becauſe I obſerved moſt of the *Apophyſes* of the Bones to be *Cartilaginous* in the *Pygmie*, I muſt conclude, that 'twas but *young*; and that probably it might grow taller; to what height I am uncertain. Yet I can by no means be induced to believe, that it would ever arrive to the Stature of a *Man*, as ſome ſort of this *Species* of Animals has been obſerved to do; for then I could not expect to have ſeen here, the *Bones* themſelves ſo ſolid, or the *Cranium* to be ſo entirely oſſified, or the *Sutures* to be ſo cloſed and indented, and the *Back-bone* and *Ribs* ſo fully hardened, as all the Bones of the *Artus* or *Limbs* were likewiſe, except at their *Apophyſes*, and in the *Carpus* and *Tarſus*. Now all theſe Parts that had theſe *Cartilaginous Apophyſes*, had already acquired ſo great a length, in proportion to the reſt of the *Body*, that 'tis not to be imagined, that they would have exceeded it, or at leaſt not much; and conſidering that *Animals* come to their ἀκμὴ of growth ſooner or later, according to their *Longevity*, as a *Man*, (till he is paſt the Age that any of theſe Creatures, it may be, arrive to) does not leave growing: this inclines me to think, ſince we found moſt parts of the Body ſo perfected here, that it might not in time much exceed the height it had already acquired. I could have wiſhed that thoſe that have wrote of any of this *Species* of *Animals*, had given us their Dimenſions and Ages; but they are ſilent herein, or at leaſt too general: only *Le Compte* obſerved an *Ape* in the Straits of *Molucca* four foot high; but this may not be our ſort. As to thoſe of *Borneo*, I was informed by a Sea-Captain who uſed thoſe Parts, that the King there formerly had one as tall as a *Man*, that would frequently come down to the Town, and a great many Stories are told of him. The ſame Captain had two given him, both young, and about the height of our *Pygmie*; but theſe were not hairy, but naked as a *Man*; and one of them that he carried to *Batavia*, was looked upon as ſo great a Rarity, that all the time he ſtaid there, his Ship was conſtantly viſited by ſuch as came to ſee it. But 'tis Matter of Fact, not Reaſoning, that will beſt determine this doubt, and a faithful Obſervation that muſt inform us, to what tallneſs this ſort of *Animal* in *Angola*, and the Countries thereabout, does uſually grow; for in different Countries they may be different in this reſpect, tho' the ſame *Species*, as is ſeen even in *Mankind*.

'Tis not therefore that I am fond of the word *Pygmie*, that I have call'd our *Animal* ſo, or that I would undertake to juſtifie our preſent Subject

Subject to be exactly the *Pygmie* of the Ancients: Of this *Quadru-manus* sort of Animals there are divers *Species*, and some may be taller and others shorter; but all of them being but *Brutes*, I was unwilling to call ours a *Man*, tho' with an *Epithet*. 'Twas necessary to give it a Name, because not tallying exactly with the Descriptions of those that are given us, I did not know but that it might be different: and it's present height corresponding so well with that of the *Pygmies* of the Ancients, (and we may allow something for growth too) induced me to this *denomination:* For as *A. Gellius* (88) tells us, the *Pygmies* were two Foot and a quarter high. *Pygmæos quoque* (saith he) *haud longè ab his nasci, quorum qui longissimi sunt, non longiores esse quàm pedes duos & quadrantem.* And so *Pliny* (89), *Suprà hos extremâ in parte Montium Trispithami, Pygmæique narrantur, ternas Spimathas longitudine, hoc est ternos dodrantes non excedentes*; that is twenty seven Inches. For as *Ludovicus Vives* (90) observes, a *Foot* contains sixteen *Digiti* or twelve *Pollices*. The *Dodrans* or *Spithama*, which is the *Palmus major*, contains nine *Pollices*; the *Palmus minor* is but three *Pollices*, or four *Digiti*, that is, a quarter of a Foot: And so *Herodotus* (91) informs us, that the *Palmus* contains four *Digiti*, and the *Cubit* six *Palmi*. The *Pygmie* therefore being *Trispithamus* or three *Spithamæ* long, was twenty seven Inches long, or as *A. Gellius* tells us, two Foot and a quarter. So our *Animal*, before Dissection measured twenty six Inches; but in the *Sceleton*, only four and twenty Inches. Not but *Strabo* (92) out of *Megasthenes*, does mention too, the πενταστιθάμους ἀνθρώπους, as well as the τριστιθάμους; but these latter (he tells us) were those, that *Homer* makes to fight the *Cranes*. However it be, if our *Ape* be not the *Pygmie* of the Ancients, yet I can't but think, the *Pygmies* of the Ancients were only a sort of *Apes*, notwithstanding all the *Romances* that have been made about them. And if so, and our *Ape* be found not much to exceed the measures given, I shall think my Conjecture in giving this Name, not amiss. But of this hereafter. And to proceed:

Since the *Bones* are the main Timber-work in this Fabrick of *Animal* Bodies, by which the whole is supported, and upon their Structure, in a good measure, does depend their manner of *local motion*, we will here more particularly enquire, which may be thought the most natural way of walking in our *Pygmie*, either as a *Quadruped* or a *Biped*, for it did both upon occasion; and we will see whether by Nature 'twas equally provided for the doing both.

Now when I observed it to go upon all four, as a *Quadruped* (as has been already remark'd) it did not place the *Palms* of the *Hands* flat to

(88) *A. Gell. Noct. Attic.* lib.9.cap.4.p.205. (89) *Plinij Nat. Hist.* lib.7.cap.2.p.m.13. (90) *Lud. Vives Comment. in D. Augustini de Civitate Dei*, lib.16.cap.8.p.m.882, (91) *Herodotus in Euterpe*, No. 149.p.m. 448. (92) *Strabo. Geograph.* lib.15.p.m.489.

the

the Ground, but went upon it's Knuckles, or rather upon the firſt Joints of the Fingers of the Fore-hands, the ſecond and third Joints being bended or touching the Ground; which ſeem'd to me ſo unuſual a way of *walking*, as I have not obſerved the like before in any *Animal*. And I did expect it the leſs here: becauſe the Fore-limbs being ſo very long, it might be thought, that it had the leſs need of thus raiſing the Body. And the whole weight of the Body thus lying upon theſe Joints of the *Fingers*, one would think, that they ſhould be ſoon tired in ſupporting it, and that *Nature* did not deſign it for a Conſtancy, but only upon occaſion, or a preſent ſhift: For if it was to be it's uſual way of walking, no doubt, for it's greater eaſe, it would place the *Palms* flat to the Ground, as all other *Animals* do the *ſole* of the *Foot*, and hereby it would be rendered better able to bear this weight.

Beſides, when it walks thus upon it's *Fingers*, the *flexure* at the Elbow will be inwards, towards the ſides of the Body, which is different from all other *Quadrupeds*, and in it's Progreſſion will be of no uſe at all, nay, will be an hinderance to it; and it will require a great tention of the *Muſcles* to keep theſe *Fore-limbs* ſtrait; and if they are not kept ſo, they muſt halt, and can't move ſwiftly; which makes me diffident, that this can't be it's Natural Poſture in going; for Nature always contrives the eaſieſt and beſt ways of *Motion*. Now in *Quadrupeds* the flection of the fore and hinder Limbs, is both the ſame way: But in a *Man* and an *Ape* (as I have before remarked from *Ariſtotle*) 'tis contrary; or as *Pliny* expreſſes it, *Homini genua & Cubita contraria, item Urſis & Simiarum generi, obid minimè pernicibus*. But how *Pliny* comes to bring in the *Bear* here, I do not underſtand: for if with the *Pariſians* (93) we ſhould here underſtand by *Genua*, the *Heel-bone*, and by *Cubita* a Bone of the *Carpus* (which are often longer in *Brutes* than in *Man*) then this will be a Property not peculiar to *Bears*, but might be obſerved in other *Quadrupeds* too. I ſhould rather own it as a Miſtake in *Pliny*. Nor can I aſſent to the *Pariſians*, *That all Animals have theſe Parts turned after the ſame manner, whatever* Ariſtotle *may report thereof*. I muſt confeſs I am of *Ariſtotle*'s mind, and any Body may experience it in himſelf, and obſerve the *flexure* of the *Cubit* to be different from that of the *Knee*; and where 'tis ſo, there the Motion upon all four, will be very awkward and unnatural, and as *Pliny* obſerves, it can't be ſwift.

I ſhall here further obſerve, that in *Quadrupeds* the make of the *Thorax*, the ſetting on of the *Scapula*, and the *Articulation* of the *Humerus*, or Shoulder-bone, are much different from what they are in *Bipeds*: for *Quadrupeds* are narrow Cheſted, and their *Thorax* not ſo round as in a *Man*, becauſe in them the *Scapulæ* are to be placed more forward upon the Ribs, and not ſo backwards as in *Men*. And the Articulation of the

(93) *Vide* Their Anatomic Deſcription of a Bear in their Memoirs, *p.m.* 44.

Shoulder

Shoulder with the *Scapula* in *Quadrupeds* lies nearer the *Ribs*; in *Man* 'tis extended farther from them. Now our *Pygmie* so exactly imitating *Humane-kind* in all these Circumstances, makes me think that *Nature* did not design it a *Quadruped*, but a *Biped*. For it had a full round *Chest* or *Thorax*, and it's *Scapulæ* placed backwards, not so forwards on the *Ribs*, and the Articulation of the *Shoulder* with the *Scapula*, stood off from the *Ribs* as it do's in *Man*. And from this very Consideration *Galen* (94) tells us, That a *Man*, if he would, could not walk upon all four, Δεόντως οὖν ἄνθρωπος (saith he) οὐδ' εἰ βουληθείη βαδίζειν ἐπὶ τῶν τεττάρων κώλων δύναιτ' ἄν, ἀπηγμένων αὐτῷ πόῤῥω τοῦ θώρακος τῶν κατὰ τὰς ὠμοπλάτας ἄρθρων. i. e. *Meritò itaque Homo ne, si volet, quidem ambulare quatuor artubus queat, quòd in ipso Scapularum Articuli longè à Thorace sint abducti.* And *Galen* all along owns, that the Structure of the *Scapula* in the *Ape*, is the same as in a *Man*; and tells us that an *Ape* is exactly neither a *Quadruped*, nor a *Biped*, but amphibious between both. For in the same *Chapter*, speaking of the *Ape*, he saith, Τὰ δὲ κατ' ὠμοπλάτας καὶ κλεῖς ἀνθρώπῳ, καὶ μάλιστα προσέοικεν, καὶ τοί γ' οὐ δεόμενος ἐοίκεται ταύτῃ τοῖς ἀνθρώποις εἰς ὠκύτητα βαδίσεως· ἀπαμφοτερίζει τοιγαροῦν ἑκατέροις τοῖς γένεσιν, καὶ οὔτε δίπουν ἐστὶν ἀκριβοῦς, οὔτε τετράπουν, ἀλλὰ καὶ ὡς δίπουν χωλὸν, οὐ γὰρ ἀκριβῶς ὀρθὸν στῆναι δύναται, καὶ ὡς τετράπουν, ἀνάπηρόν τε ἅμα, καὶ βραδὺ, διὰ τὸ πλεῖστον ἀπῆχθαι τοῦ θώρακος αὐτὸ τὸ κατ' ὦμον ἄρθρον, καθάπερ εἰ καὶ τῶν ἄλλων τινὸς ζώων ἀποσπασθὲν τοῦ θώρακος ἐκτὸς ἀποχωρήσειεν· i. e. *Quod verò ad Scapulas & Claves attinet, homini maxime est similis, quamquàm eâ parte homini similis esse non debebat, nam quod ad ambulationis celeritatem pertinet, simia inter genus utrumque ambigit, neque enim Bipes penitus est, neque Quadrupes; sed quatenùs est Bipes, clauda est, non enim rectè planè stare potest; & quatenùs est Quadrupes, mutila simul est, ac tarda, quòd Humeri articulus à Thorace plurimùm sit abductus, quemadmodùm si idem articulus in alio quopiam animante à Thorace divulsus extra secessisset.* Now altho' *Galen* tells us here, that an *Ape* can scarce stand upright; yet in another place he declares quite the contrary; for, saith he (95), Ἔστι δ' ὡμοιότατος ἀνθρώπῳ πίθηκος, ὡς ἂν στρογγύλον τε μάλιστ' ἔχων τὸ πρόσωπον, καὶ τοὺς κυνόδοντας μικροὺς, τὸ στέρνον πλατὺ, καὶ τὰς κλεῖς μακροτέρας, καὶ ἥκιστα δασὺς, καὶ ὀρθὸς ἵσταται καλῶς, ὡς καὶ βαδίζειν ἀμέμπτως, καὶ θεῖν ὠκέως δύνασθαι. i. e. *Est autem simillima homini Simia, ut quæ rotundam præcipuè habet faciem, Dentes Caninos parvos, latum Pectus, Claviculas longiores, minimùm Pilosa, quæ recta etiam stat bellè, ut & incedere sine errore, & currere velociter possit.*

We have seen upon what accounts our *Pygmie* may be thought not to be a *Quadruped*, or that it's natural *Gression* is not on all four, and how ill it is provided to go that way. We will now enquire, Whether there is not more reason to think that *Nature* designed it

(94) *Galen de usu Partium*, lib. 13. cap. 11. p. m. 627. (95) *Galen de usu Partium*, lib. 11. cap. 2.

to be a *Biped*, and to walk erect. And in the doing this, we may obſerve the largeneſs of the *Heel-bone* in the Foot, which being ſo much extended, ſufficiently ſecures the Body from falling backwards, as the length of the *Toes* do's it's being caſt too forwards; and the *Arms* being ſo long, may eaſily give a poiſe either way, for the preſerving the *Æquilibrium* of the Body. And it may be, this is the Reaſon why the *Pongos* hold their *hands* behind their *Necks*, when they walk erect. If we conſider the *Articulation* of the *Os Femoris* in the *Acetabulum*, there is no difference to be obſerved from a *Man*, nor indeed in any other Circumſtance that relates to this Matter. 'Tis true, in my firſt *figure* I repreſent him as weak and feeble and bending; for when I firſt ſaw him, he was dying; beſides, being young, and ill, it had not that ſtrength in it's Limbs, as in time and in health, it might have acquired; and I was willing to repreſent what I ſaw my ſelf. But what very much ſways with me, to think him a *Biped*, and to go erect, and that *Nature* did deſign it ſo, much more than any of the *Ape* and *Monkey*-kind beſides, was my obſerving the *Peritonæum* to be entire, and not perforated or protruded in the *Groin*, as it is in *Apes* and *Dogs*, and other *Quadrupeds*: as likewiſe, becauſe I found the *Pericardium* in our *Pygmie* to be faſtened to the *Diaphragm*, as 'tis in *Man*, and which is not ſo in *Apes* and *Monkeys*. Both which are ſo remarkable differences, and (as I have already remarked) ſo particularly contrived for the advantage of an *erect Poſture* of the Body, that, I think, the Inference is eaſie, and we may ſafely conclude, that *Nature* intended it a *Biped*, and hath not been wanting in any thing, in forming the *Organs*, and all Parts accordingly; and if not altogether ſo exactly as in a *Man*, yet much more than in any other *Brute* beſides: For I own it, as my conſtant Opinion, (notwithſtanding the ill ſurmiſe and ſuggeſtion made by a forward Gentleman) that tho' our *Pygmie* has many Advantages above the reſt of it's *Species*, yet I ſtill think it but a ſort of *Ape* and a meer *Brute*; and as the *Proverb* has it, πίθηκος δὲ ὁ πίθηκος, κἂν χρύσεα ἔχῃ σύμβολα. (96) *An Ape is an Ape, tho' finely clad.*

This *Proverb*, perhaps, might have it's riſe from ſome ſuch occaſion as *Lucian* mentions in another place; and the Story being pleaſant, and relating to what we have been juſt now diſcourſing upon, *viz.* it's manner of *Motion*, we will inſert it here, and then proceed to the *Myology*. *Lucian* (97) therefore ſaith, Λέγεται δὲ καὶ βασιλεύς τις Αἰγύπτιος, πιθήκους ποτὲ πυρρίχιζειν διδάξαι, &c. i. e. *Fertur Ægyptius Rex quidam Simias ut tripudiarent inſtituiſſe, Animaliaque (nam admodùm ad res humanas imitandas ſunt apta) celerrimè didiciſſe, ut Perſonata ac Purpurata ſaltarent: eratque admodùm viſu res digna, donec Spectator quiſpiam*

(96) *Lucian. adverſus indoctum. Oper.* T. m. 865. (97) *Lucian. Piſcator ſive Reviviſcentes.* p. m. 214.

urbanus

urbanus nuces è ſinu depromptas in medium abjiceret: id ſimiæ videntes, tripudij oblitæ, id quod erat, ſimiæ pro ſaltatoribus evaſerunt, Perſonas conterebant, veſtitum diſcerpebant, invicemque pro fructibus depugnabant, ità ut Pyrriches ordo diſſolveretur, à Theatroque ridebatur. And in another place (98) he tells the like Story of *Cleopatra*'s *Apes*. So that they can, not only go erect, but can dance in a figure too, if taught to do ſo. But this is not *natural*, but acquired by *Art*; and even Dogs have been taught to do the ſame. So *Ælian* (99) tells us, that an *Ape* is eaſily taught to perform any Action; if 'tis taught to Dance, 'twill Dance, or Play upon the Pipe; and that once he ſaw one ſupply the Place of a Coachman; holding the Reins; pulling them in, or letting them looſe, and uſing the Whip, as there was occaſion. And that Story in *Kercher* (100), of the Embaſſie that the *King* of *Bengal* ſent to the *Great Mogul* in the Year 1660 is very remarkable, where a great *Ape* richly adorned, did drive a Chariot magnificently gilded, and ſet with Jewels; and did it with the greateſt State and Pageantry in the World, and as skilfully as the beſt Coach-man could do.

It would be infinite to relate all the Stories that are told us of them; and I have been too tedious already. I ſhall therefore haſten now: But muſt inform the Reader, that I am obliged to my good Friend Mr. *Cowper*, not only for deſigning all my *figures*; but obtained of him likewiſe to draw up this enſuing account of the *Muſcles*; whoſe great Skill and Knowledge herein, is ſufficiently made evident by his *Myotomia Reformata*, or, *New Adminiſtration of all the Muſcles in Humane Bodies*, publiſhed ſometime ſince: To which I refer my *Reader*, for a fuller account of them, whenever 'tis ſaid, that ſuch and ſuch *Muſcles* in the *Pygmie* reſembled thoſe in *Humane Bodies*. And for his greater Eaſe, there are References all along made, to the *figures*; where the firſt Number ſignifies the *Figure*, or *Table*; the ſecond Number the *Muſcle* exhibited or repreſented there.

(98) *Lucian. pro Mercede conductis*, p.m.363. (99) *Ælian. Hiſt. Animal.* lib.5.p.m.26. (100) *Kercher. China illuſtrata*, Part.4.cap.7. p.m.195.

THE MYOTOMY OR DESCRIPTION OF THE MUSCLES.

Of the Muſcles *of the* Abdomen.

THE *Obliquus Deſcendens* (Fig. 3. 38.) agreed in it's ſituation and progreſs, with that of a *Humane* Body, as the accurate *Galen* and *Veſalius* deſcribe it, and did not partly ſpring from any of the *Tranſverſe Proceſſes* of the *Vertebræ* of the Loins; or their Ligaments and Membranes, as the later Writers would have it in *Humane* Bodies. Neither did any part of the *Obliquus Aſcendens* (Fig. 3. 39.) ariſe from the *Lumbal Vertebræ*, as *Veſalius* deſcribes it in *Men*: but agreed with the Deſcription of *Galen*, and did not differ from the *Humane*. *Drelincourt* obſerves the like in *Apes*: The ſame Author takes notice, that the *Pyramidales* are wanting in thoſe *Animals*; which were abſent alſo in the *Pygmie*. The *Rectus* (Fig. 3. 40.) agreed with the *Humane*, and had no Connection with a Muſcular Portion, ſpringing either from the *Clavicula* or firſt *Rib*, as *Veſalius* has figured *Galen*'s Deſcription of it in *Apes* and *Dogs*. The *Pariſians* ſay, *In Monkeys it aſcends to the top, paſſing under the* Pectoralis *and* Little Serratus, *it was Fleſhy only to the half of the* Sternum, *the reſt being but a meer Tendon. Drelincourt* obſerves the *Tendinous Inſcriptions* of theſe *Muſcles* in *Apes*, appear'd only on their inſide, and not on the out. The *Tranſverſalis* in this, as in moſt *Quadrupeds*, did not differ from that in *Man*.

The

The *Cremaſter Muſcles* were very ſmall by reaſon of the leanneſs of the Subject. The *Accelerator Spermatis* (Fig. 7. G.) *Erector Penis* (Fig. ib. K.) and *Tranſverſalis Penis* (ib. L.) agreed in their Situation and Figure with thoſe of *Men*; the laſt of which only varied in it's Termination, as appears in the *Figure*.

The *Detruſor Urinæ* agreed with the Figure of the *Bladder* of *Urine* of this *Animal*. The *Sphincter Veſicæ* differ'd not from that in *Men*; and moſt, if not all *Quadrupeds*; it being placed in the *Neck* of the *Bladder*, beyond the *Caruncula* or *Caput Gallinaginis*, immediately above the *Proſtates*. The *Sphincter Ani* differ'd not from the *Humane*; unleſs it might ſeem ſomewhat leſs. The *Levatores Ani* were longer and more divided from each other, than in *Humane* Bodies: The like may be obſerv'd in moſt, if not all *Quadrupeds*; by reaſon of the Length and differing Figure of the *Bones*, whence theſe *Muſcles* take their riſe.

I could find no *Occipital* nor *Frontal Muſcles* in this *Animal*.

The *Orbicularis Palpebrarum* (Fig. 3. 2.) and *Aperiens Palpebram Rectus* agreed with the *Humane*, and thoſe of moſt *Quadrupeds*. The *Obliquus Superior*, *Inferior*, *Elevator*, *Depreſſor*, *Adductor*, and *Abductor Oculi*, agreed with thoſe of the *Humane* Eye and an *Ape*'s, as *Julius Caſſerius Placentinus* Figures them Tab. 4. *Organi Viſûs*, Fig. XII. & XIII. Nor was there any *Muſculus Septimus Brutorum* in this *Animal*. The *Alæ Naſi* of the *Pygmie* being ſmall, thoſe *Muſcles* only appear'd, which from their Office are call'd *Conſtrictores Alarum Naſi, ac Depreſſores Labij ſuperioris*.

The *Quadratus Genæ*, or *Platuſma Myoides*, by reaſon of the Leanneſs of the Subject, (as I ſuſpect) did not appear Fleſhy. The *Buccinator* (Fig. 3. 7.) was longer than that in *Man*. Nor was it any where intertext with various orders of Fibres, as *Anatomiſts* commonly repreſent it in *Man*; or ſeem'd to ariſe from any other Parts, but the *Proceſſus Coronæ*; from whence it's Fibres had a ſtrait progreſs to the Angle of the *Lips*; as in *Men*: This and the former *Muſcles*, are counted *Common Muſcles* to the *Cheeks* and *Lips*.

The *Muſcles Common* to both *Lips*, are the *Zygomaticus*, (Fig. 3. 3.) *Elevator*, *Depreſſor*, and *Conſtrictor Labiorum*, which were not ſo conſpicuous, as in *Men*. The *Proper Muſcles* of the *upper* and *under Lip*, were very diſtinct in this *Animal*, (*viz.*) the *Elevator* and *Depreſſor Labij Superioris*, (Fig. 3. 4.) the laſt of which is mentioned above, and called *Conſtrictor Alæ Naſi*; the *Depreſſor* and *Elevator Labij Superioris*, (Fig. 3. 5.)

Tho-

Tho' the *Auricula* or *Outward Ear* of this *Animal* was as large, if not larger than that of a *Man*, yet I could not obſerve any *Muſcle*, which ſerv'd for it's *Motion*. I could not examine the *Muſcles* of the *Tympanum* and *Stapes*, by reaſon the *Bones* were kept entire for a *Sceleton*.

The *Sternohyoideus*, *Coracohyoideus*, *Mylohyoideus* and *Geniohyoideus*, did not differ from thoſe in *Men*; which *Drelincourt* has alſo obſerved of the former in the *Female Ape*. The *Stylohyoideus* did not ariſe from the *Styliform Proceſs*; that *Proceſs* being wanting in this *Animal*, or at leaſt did not appear, by reaſon it was young; this *Muſcle* therefore ſeem'd to ariſe from the *Os Petroſum*.

The *Geniogloſſus*, by reaſon of the length of the *Lower Jaw*, was longer than that in *Man*. The *Ceratogloſſus* and *Styloglossus* differ'd not; except that the latter ariſes from the *Os Petroſum*, like the *Stylohyoideus*. The other *Muſcles* appear'd in this *Animal* belonging to it's *Tongue*. The *Sternothyroideus*, *Hyothyroideus*, *Cricothyroideus*, *Cricoarytænoideus*, *Poſticus* and *Lateralis*; the *Thyroarytænoideus*, and *Arytænoideus* varied not from thoſe in *Men*. The *Muſcles* of the *Fauces* alſo, differ'd not from thoſe in *Man*, (*viz.*) The *Stylopharyngæus*, *Pterygopharyngæus*, *Oeſophagæus* and *Vaginalis Gulæ*. The following *Muſcles* of the *Gargareon* were exactly like the *Humane*, (viz.) the *Sphenoſtaphylinus* and *Pterygoſtaphylinus*.

Now all the *Muſcles* of the *Lower Jaw* may be ſeen without incommoding any hereafter mentioned. The *Temporalis* (Fig. 3. 1.) and *Maſſeter* (Fig. 3. 6.) ſeem'd ſomewhat larger than the *Humane*, and as they are commonly in *Brutes*, by reaſon their lower *Jaw-bones* are larger than thoſe of *Men*; yet theſe *Muſcles* were not ſo ſtrong, as thoſe of *Monkeys*, as the *Pariſians* repreſent them. The *Superior Salival Duct* paſt over the *Maſſeter*, and entred the *Muſculus Buccinator* of the *Pygmie*, as in *Man*. The *Digaſtricus* aroſe not from the *Mammiform Proceſs*, as in *Men*; but ſprang from the *Occipital-bone*; it's progreſs in this *Animal* agreed exactly with that in a *Humane* Body. *Drelincourt* deſcribes it in *Apes* thus, *Tendinem habet intermedium pollice longum, & gracilem, enaſcitur, autem non ab Apophyſe Styloide, ſed ab oſſe Baſilari.*

The *Muſcles* of the *Thorax* which appear on the fore-part come next. The *Intercoſtales externi* and *interni*, (Fig. 4. 32.) *Triangularis*, *Scalenus Primus*, *Secundus* and *Tertius*; *Subclavius* (Fig. 3. 34.) *Serratus minor anticus*, (Fig. 3. 35.) *Serratus major anticus*, (Fig. 3. 37.) All theſe were like the *Humane*. The *Pariſians* tell us, That the *Great Serratus* did in in their *Monkeys* ariſe from the fourth, fifth, and ſixth *Vertebra* of the *Neck*; but it was not ſo in the *Pygmie*: The like is taken notice of by *Drelincourt* in *Apes*. The *Diaphragma* was larger in this *Animal*, than in *Man*,

Man, agreeable to the Capacity of its *Thorax:* The reſt of the *Muſcles* of the *Thorax* appear on it's Back-part, which we ſhall mention hereafter.

Before I paſs to the *Muſcles* on the Back-part of our *Pygmie*, I ſhall take notice of a *Pair* of *Muſcles*, that do not appear in *Humane Bodies*; which from their Uſe may be call'd *Elevatores Clavicularum*, (Fig. 3. 12.) Either of them ariſes Fleſhy from the *Tranſverſe Proceſſes* of the ſecond and third *Vertebra* of the *Neck*; and deſcends obliquely outwards to it's broad *Inſertion* at the upper part of the *Clavicula*; when it Acts, it draws up the *Clavicle*, aſſiſting the *Elevator Scapulæ*, and upper part of the *Cucularis*, in raiſing the whole *Shoulder*. The ſituation of this *Muſcle*, is not unlike the upper part of that repreſented by *Veſalius* in his ſixth *Table* of the *Muſcles* O. T. P. Q. which he ſays is found in *Dogs* and *Apes*, and deſcribed by *Galen* in *Humane* Bodies, in whom *it is* not exiſtent. *Drelincourt* calls it *Levator Omoplatæ*, (adding) *ab Apophyſibus tranſverſis cervicalibus in Acromion & extremum claviculæ extenditur.*

The *Muſcles* imploy'd in the Motion of the *Scapula*, are the *Cucularis*. (Fig.4. 1.1.1.) *Rhomboides* (Fig.4.6.) *Levator Scapulæ* (ib.5.) Theſe alſo agreed with the *Humane:* The like being taken notice of by *Drelincourt* of the *Cucularis*, in the *Female Ape*. The reſt of the *Muſcles* of the *Thorax*, are the *Serratus ſuperior poſticus*, (Fig. 4. 7.) the *Serratus inferior poſticus* (Fig. 4. 32. 32.) Theſe differ'd not from thoſe in *Men*. The *Sacrolumbalis* (Fig, 4. 29.) was not ſo thick as in *Men*, but was every way ſlenderer.

The *Muſcles* imploy'd in the *Motion* of the *Head* of the *Pygmie*, differed very little from thoſe in *Man*; as the *Splenius*, (Fig. 4. 2.) *Complexus*, (Fig. 4. 4.) *Rectus major*, *Rectus minor*, *Obliquus Superior*, and *Obliquus Inferior*, neither was this *Inferior Oblique Muſcle* larger than in *Man*; as *Veſalius*, *Lib.* II. *Cap.* XXVIII. aſſures us, it is in *Apes* and *Dogs*. The *Maſtoideus* (Fig. 3. 8. 8.) was chiefly inſerted to the *Occipital-bone*, as the *Pariſians* obſerve it in *Monkeys*. The *Rectus internus major*, not commonly deſcribed by Authors in *Humane Bodies*, tho' it is very plain and conſtant in all thoſe, I have hitherto lookt for it, was alſo in the *Pygmie*. The *Rectus internus minor*, or *Muſculus Annuens*, ſometimes obſerved by me in *Humane Bodies*, was alſo in this *Animal*; and ſo was the *Rectus Lateralis* deſcribed by *Falloppius* in *Men*. Nor was any of thoſe *Muſcles* I have diſcovered in *Humane Bodies*, wanting in this *Animal*, but the *Interſpinales Colli*.

The *Longi Colli* of this *Animal*, appear'd to be longer and larger than thoſe of *Humane* Bodies. The *Spinalis Colli* and *Tranſverſalis Colli* were like thoſe in *Humane* Bodies. The *Interſpinales Colli*, which I have elſewhere deſcribed in *Men*, did not appear in this *Animal*. The *Longiſſi-*

mus

mus Dorſi (Fig. 4. 28.) not unlike the *Sacrolumbalis* above noted, was not ſo thick and fleſhy at it's Origin from the *Os Ilium*, *Sacrum*, and *Vertebræ* of the Loins; nor was it's external Surface in the *Pygmie* ſo tendinous, as in *Humane* Bodies; but was ſomewhat broader. The *Quadratus Lumborum* was longer than in *Men*, agreeable to the ſpace between the *Spine* of the *Os Ilium*, and lower *Rib* of this *Animal*. See the Figure of the *Sceleton*. The *Sacer*, and *Semiſpinatus*, differ'd not from the *Humane*, as I have repreſented them in my *Myotomia Reformata*, pag. 135.

The *Muſcles* of the Superior Parts and Trunk of the Body being diſpatch't, we come next to thoſe of the *Limbs*; and firſt of the *Arm* or *Os Humeri*. The *Pectoralis* (Fig. 3. 33.) was much broader at it's Original, from the *Sternum*, than in *Man*: it's Fibres were decuſſated near it's Inſertion. *Galen* and *Jacobus Sylvius* take notice of another *Muſcle* under the *Pectoralis* in *Apes*, which is implanted into the *Arm* near the *Pectoral Muſcle*. The *Deltoides* (Fig. 3. 15. and 4. 12.) was alſo broader at it's Original. *Jac. Sylvius* tells us, this *Muſcle* in *Apes* is like that of a *Man*. The *Supraſpinatus* (Fig. 4. 8.) agreed with the *Humane* in it's ſituation; but was ſomewhat broader at it's Origin from the upper part of the *Baſis Scapulæ*. The *Infraſpinatus*, as the former *Muſcle* was broader at it's Original from the *Scapula*, this on the contrary was there narrower than the *Humane*. *Sylvius* and *Drelincourt* mention theſe *Muſcles* in *Apes*; but whether they reſemble thoſe of *Men*, or this *Animal*, do's not appear by their Accounts. *Teres minor*, (Fig. 4. 10.) this is ſometimes wanting in *Men*: it was ſomewhat ſhorter and thicker in this *Animal*. The *Teres major*, (Fig. 4. 11.) was very large in the *Pygmie*. The *Latiſſimus Dorſi* agreed with the *Humane* in it's Original and Progreſs towards the *Arm*; but when it arrived at the *Axilla*, it parted with a fleſhy Portion, which deſcended on the inſide of the *Arm*, with the *Muſculus Biceps*, and becoming a ſlender Tendon is inſerted to the internal protuberance of the *Os Humeri*: (*vide* Fig. 8. C.) which repreſents the production of this *Muſcle*. This *Appendix* or *Acceſſory Muſcle* of the *Latiſſimus Dorſi*, is not peculiar to this *Animal*; the like being found in *Apes* according to *Jacobus Sylvius*, who, I am inclin'd to think is miſtaken, in repreſenting it's Inſertion at the *Olecranum* of that *Animal*: This part of the *Latiſſimus Dorſi* ſeems a proper Inſtrument in turning the *Os Humeri* to a prone Poſition, when theſe *Animals* go on all four, for the more advantagious ſtepping with the Fore-feet, by raiſing the *Os Humeri*, and turning it backwards. *Galen* in *Lib. de Muſculis*, *Cap.* XIX. deſcribes this *Appendix* of the *Latiſſimus Dorſi*, under the Title of a *ſmall Muſcle* found in the Articulation of the *Shoulder*. The *Coracobrachialis* was like that in *Man*, but had no diviſion in it for any Nerve to paſs through. The *Subſcapularis* was alſo like that in *Man*.

The

The *Muſcles* employed in Bending and Extending the *Cubit*, differ'd very little from the *Humane*, viz. *Biceps*, (Fig. 3.16.16.) *Brachiæus internus*, (ib. 18.) *Gemellus*, (Fig. 4. 14.) *Brachiæus externus*, *Anconæus*, (Fig. 4. 15. 15.) The like is obſerved of theſe *Muſcles* by *Sylvius* in *Apes*, who only adds that the *Extenders* are remarkably large in that *Animal*. The *Biceps* in the *Pygmie*, had the ſame double tendinous Termination, as in *Man*.

The *Caro Muſculoſa Quadrata* appear'd in the *Palm* of the *Pygmie*: nor was there any fleſhy Belly, and long Tendon to the *Palmaris*; yet there was a *Tendon* or Ligament extended in the *Palm*; the like has been often taken notice of in *Men*, as *Realdus Columbus* alſo obſerves. The *Pariſians* tell us, the *Palmaris in Monkeys is extraordinary large*.

The *Muſcles* of the *four Fingers* were, the *Perforatus*, (Fig. 3. 24.) *Perforans*, (Fig. 3. 25.) *Lumbricales*; (ib. 31.) theſe agreed exactly with the *Humane*; but the *Extenſor Digitorum Communis* (Fig 4. 21.) was larger and diſtinct from the *Extenſor minimi Digiti*, as in *Men* and *Apes*, which *Drelincourt* obſerves. The *Extenſor Indicis*, *Abductor Indicis*, (Fig. 3. 30.) *Extenſor minimi digiti*, (Fig. 4. 20.) *Abductor minimi digitis* (Fig. 4. 25.) and *Interoſſij Manûs*, differ'd not from thoſe in *Men*. All the *Muſcles* of the *Thumb* reſembled thoſe in *Men*, (*viz.*) the *Flexor tertij internodij pollicis*, *Abductor Pollicis*, (Fig. 3. 28.) *Flexor primi & ſecundi oſſis pollicis*, (ib. 29.) *Adductor Pollicis*, (Fig. 4. 27.) *Extenſor primi internodij Pollicis*, (ib. 23.) *Extenſor ſecundi oſſis Pollicis*, and *Extenſor tertij oſſis pollicis*. The *Muſcles* of the *Wriſt* alſo agreed with thoſe in *Men*; *viz.* the *Flexor Carpi Radialis*, (Fig. 3. 23.) and *Ulnaris*, (ib. 26.) the *Extenſor Carpi Radialis*, (ib. 19.) and *Ulnaris*; (ib. 20.) The two laſt *Drelincourt* ſays, are alſo like the *Humane* in the *Male-Ape*.

The *Muſcles* employ'd in the *Pronation* and *Supination* of the *Radius* in the *Pygmie*, were larger in proportion than thoſe in *Men*. The *Pronator Radij teres* (Fig. 3. 20.) had a double Origin; the one from the internal Protuberance of the *Os Humeri*, the other from the upper part of the *Ulna*: the *Pronator Radij Quadratus*. The *Supinator Radij Longus* is taken notice of by *Drelincourt* in *Apes* to be like that of *Men*. The *Supinator Radij brevis*, (Fig. 4. 24.) agreed exactly with the *Humane*.

The *Muſcles* of no part diſagreed ſo much from thoſe in *Men*, as thoſe of the *Thigh* of this *Animal*: Here was no *Glutæus minor*; nor did the *Glutæus maximus* (Fig. 4. 33. 33.) reſemble the *Humane*: It was meerly *Tendinous* at it's Origin, from the whole *Spine* of the *Os Ilium*; it was much longer, and not ſo thick as in *Man*; nor were it's fleſhy Fibres ſo divided: This *Sylvius* deſcribes for the *Membranoſus* in *Apes*. The *Pariſians* give a very imperfect account of the *Muſculi Glutæi* in *Monkeys*, where they tell us, *The Muſcles of the Buttock had a Figure differing from*

thoſe in Men, being ſhorter, by reaſon the Oſſa Ilium *in Apes are much ſtraiter than in Man.* The *Glutæus medius* was alſo longer than that in *Man.* The *Pſoas magnus* was alſo longer; which *Sylvius* (from it's Figure I ſuppoſe) calls *Lumbaris Biceps* in *Apes.* The *Pſoas parvus* was alſo longer and larger, than in *Man.* Beſides this, the *Pariſians* tell us of two other little *Muſcles* in *Monkeys*, which have the ſame Origin as the *Pſoas*; and were inſerted into the upper and inward part of the *Os Pubis.* The *Iliacus Internus* was long, conformable to the Figure of the *Os Ilium* of this *Animal*; (*Vide* Fig. 5. 28. 28.) The *Pectineus* was not very diſtinct. The *Triceps* (Fig. 4. 37.) had no Tendinous Termination at the lower *Appendix* of the *Thigh-bone* internally. *Jacobus Sylvius* ſays in *Apes*, *Tricipitis pars longiſſima à Tubere in Condylum : altera portio inſignis, à Tubere etiam nata, poſtico cruri propè toti affixa, ad uſque Cavitatem inter duos condylos mediam : tertia minima & breviſſima oſſis pubis in medium & poſticum Os Cruris.* The *Pyriformis* (Fig. 4. 35.) was like the *Humane*; nor did it appear leſs in proportion, as the *Pariſians* repreſent it, in *Monkeys*, who ſay, *This Muſcle, inſtead of taking it's riſe from the lower and external part of the* Os Sacrum, *it proceeded from the* Iſchium *near the* Cavitas Cotyloides. The *Marſupialis* had it's *Marſupium* much broader than in *Men.* The *Quadratus Femoris* was leſs than in *Man.* The *Obturator extrorſum* was much larger.

The *Common Muſcles* of the *Thigh* and *Leg*, agreed in their Situation and Number, with thoſe of *Men.* The *Membranoſus* (Fig. 3. 41.) had not ſo ſtrong a Tendon to cover the *Muſcles* of the *Thighs* and *Tibia*, as in *Man.* The *Sartorius* (Fig. 3. 42.) agreed with the *Humane.* The *Gracilis* (Fig. 3. 48.) was thicker and larger near it's Origin. The *Seminervoſus* (Fig. 4. 40.) and *Semimembranoſus*, differ'd not from the *Humane.* The *Biceps* (Fig. 4. 41.) had it's ſecond beginning, ſomewhat lower, than in *Men :* The *Pariſians* tell us, *The* Biceps *in Monkeys had not a double Origin as in Man, but proceeded intire, from the Knob of the* Iſchium, *and was inſerted to the upper part of the* Perona. *This ſingle Head was in requital very thick and ſtrong.* The *Rectus* had a double order of *Fibres*, as in *Man.* The *Popliteus*, I muſt confeſs eſcap't my notice. *Sylvius* tells us, in *Apes*, it agrees with *Men.* The reſt of the *Muſcles* of this part, which we eſteem *Proper* to the *Tibia*, and ariſe from the *Os Femoris*, were much leſs than the *Humane*, as the *Vaſtus Internus*, (Fig. 3. 44.) *Cruræus*, and *Vaſtus externus.*

The Muſcles of the *Tarſus* or *Foot*, agreed in Number and Situation with the *Humane*; but varied in their Figure. The *Gaſterocnemius externus* (Fig. 4. 43.) had not ſo large a Belly, nor were it's Fibres ſo variouſly diſpoſed; but it continued fleſhy much lower, than in *Man.* *Sylvius* tells us in *Apes*, *Capita Gemellorum* (meaning this *Muſcle*) *Oſſa Seſamoidea habent, firmantia in Condylis Crus cum Tibia.* The *Plantaris* differ'd not from that in *Man.* The *Gaſterocnemius internus*, or *ſoleus*, (Fig.

(Fig. 4. 44.) continued fleſhy to the *Os Calcis*, as *Sylvius* obſerved it in *Apes*. The *Tibialis Anticus* (Fig. 3. 49.) was much larger, and continued fleſhy much lower, than in Man. *Sylvius* obſerv'd an *Os Seſamoides* in the Tendon of this *Muſcle* in *Apes*. The *Peroneus primus* (Fig. 3. 51.) differ'd very little from that in *Man*; it's Tendon having the ſame progreſs in the Bottom of the *Foot*, to the Bone of the *Metatarſus* of the *Great Toe*; which is nevertheleſs denied by *Galen* to be exiſtent in *Man*; for which *Veſalius*, *lib.* 2. *cap.* 59. ſeverely Cenſures him. I have more than once, ſeen a *Boney body*, placed in this *Tendon* at it's *Flexure* on the *Os Cuboides* in *Humane Bodies*: The like is taken notice of by *Sylvius* in an *Ape*. The *Peroneus ſecundus* differ'd not from that in *Man*. The *Tibialis Poſticus* (Fig. 4. 45.) was not ſo large as in *Man*.

The *Muſcles* of the *Great Toe* differ'd from the *Humane*. The *Extenſor Pollicis longus* (Fig. 3. 52.) had a more Oblique progreſs, and was fleſhy lower. The *Extenſor Pollicis brevis* (Fig. 3. 53.) was much larger, and it's progreſs on the *Foot* almoſt tranſverſe. The *Flexor Pollicis longus* was pretty large. The *Flexor Pollicis brevis* (Fig. 4. 47.) was very large, and inſeparably joined with the *Abductor*, which was very little. The *Pariſians* tell us, *The Great Toes of the Monkeys had Muſcles like thoſe of a Man's Thumb*. The *Extenſor Digitorum Pedis longus* (Fig. 3. 53.) had no Tendon implanted on the *Os Metatarſi* of the *Little Toe*. The *Perforatus* (Fig. 4. 46.) *Perforans*, (ib. 48.) *Lumbricales*, and *Abductor minimi Digiti*, differ'd very little from thoſe in *Men*. The *Muſculus Extenſor Digitorum brevis*, and *Tranſverſalis Pedis* did not appear in this *Animal*.

I ſhall not at preſent give the *Reader* the trouble of the *Reflections*, that I intended, upon the Obſervations made in the *Anatomy* of this remarkable Creature; ſince I am conſcious (having been ſo tedious already) that 'twill but farther tire him, and my ſelf too. I ſhall therefore now conclude this *Diſcourſe*, with a brief Recapitulation of the Inſtances I have given, wherein our *Pygmie*, more reſembled the *Humane kind*, than *Apes* and *Monkeys* do: As likewiſe ſum up thoſe, wherein it differ'd from a *Man*, and imitated the *Ape-kind*. The *Catalogues* of both are ſo large, that they ſufficiently evince, That our *Pygmie* is no *Man*, nor yet the *Common Ape*; but a ſort of *Animal* between both; and tho' a *Biped*, yet of the *Quadrumanus-kind*; tho' ſome *Men* too, have been obſerved to uſe their *Feet* like *Hands*, as I have ſeen ſeveral.

The Orang-Outang *or* Pygmie *more reſembled a* Man, *than* Apes *and* Monkeys *do.*

1. IN having the *Hair* of the *Shoulder* tending downwards; and that of the *Arm*, upwards.

2. In the *Face* 'twas liker a *Man*; having the *Forehead* larger, and the *Roſtrum* or *Chin* ſhorter.

3. In the *outward Ear* likewiſe; except as to it's *Cartilage*, which was thinner as in *Apes*.

4. In the *Fingers*; which were much thicker than in *Apes*.

5. In being in all reſpects deſigned by *Nature*, to walk erect; whereas *Apes* and *Monkeys* want a great many Advantages to do ſo.

6. The *Nates* or *Buttocks* larger than in the *Ape-kind*.

7. It had *Calves* in it's *Legs*.

8. The *Shoulders* and *Breaſt* were more ſpread.

9. The *Heel* was longer.

10. The *Membrana Adipoſa* placed here, next to the *Skin*.

11. The *Peritonæum* in the *Groin* entire; and not perforated, or protruded, as in *Apes* and *Monkeys*.

12. The *Inteſtines* or *Guts* much longer.

13. The *Inteſtines* being very different in their bigneſs, or largeneſs of their *Canalis*.

14. In having a *Cæcum* or *Appendicula Vermiformis*, which *Apes* and *Monkeys* have not: and in not having the beginning of the *Colon* ſo projected or extended, as *Apes* and *Monkeys* have.

15. The Inſertion of the *Ductus Bilarius* and the *Ductus Pancreaticus* in a *Man*, the *Pygmie*, and an *Ape* was at the ſame *Orifice*. In a *Monkey* there was two Inches diſtance.

16. The *Colon* was here longer.

17. The *Liver* not divided into *Lobes*, as in *Apes* and *Monkeys*; but entire, as in *Man*.

18. The *Biliary Veſſels*, the ſame as in *Man*.

19. The *Spleen* the ſame.

20. The *Pancreas* the ſame.

21. The Number of the *Lobes* of the *Lungs*, the ſame as a *Man's*.

22. The *Pericardium* faſtened to the *Diaphragm*, as in *Man*; but is not ſo in *Apes* and *Monkeys*.

23. The *Cone* of the *Heart*, not ſo pointed, as in *Apes*.

24. It had not thoſe *Pouches* in the *Chaps*, as *Apes* and *Monkeys* have.

25. The *Brain* was abundantly larger than in *Apes*; and all it's Parts exactly formed like the *Humane Brain*.

26. The *Cranium* more globous; and twice as big as an *Ape*'s or *Monkey*'s.

27. All

27. All the *Sutures* here, like the *Humane:* And in the *Lambdoidal Suture* were the *Oſſa triquetra Wormiana.* In *Apes* and *Monkeys* 'tis otherwiſe.

28. It had an *Os Cribriforme*, and the *Criſta Galli*; which *Monkeys* have not.

29. The *Sella Equina* here, the ſame as in *Man*; in the *Ape-kind* 'tis more riſing and eminent.

30. The *Proceſſus Pterygoides*, as in *Man:* In *Apes* and *Monkeys* they are wanting.

31. The *Oſſa Bregmatis* and *Temporum* here the ſame as in *Man.* In *Monkeys* they are different.

32. The *Os Zygomaticum* in the *Pygmie* was ſmall; in the *Monkey* and *Apes* 'tis bigger.

33. The Shape of the *Teeth* more reſembled the *Humane*, eſpecially the *Dentes Canini* and *Molares.*

34. The *Tranſverſe Apophyſes* of the *Vertebræ* of the *Neck*, and the Sixth and Seventh *Vertebra*, were liker the *Humane*, than theſe Parts in *Apes* and *Monkeys* are.

35. The *Vertebræ* of the *Neck* had not thoſe *Foramina* for tranſmitting the *Nerves*; which *Apes* have and *Man* has not.

36. The *Vertebræ* of the *Back*, and their *Apophyſes Rectæ* like the *Humane:* and in the lower *Vertebræ* but two *Apophyſes infernæ*; not four, as in *Apes.*

37. There were but five *Vertebræ* of the *Loins* here, as in *Man:* in *Apes* and *Monkeys* there are ſix.

38. The *Spines* of the *Lumbal Vertebræ* ſtrait, as in *Man.*

39. The *Os Sacrum* was compoſed of five *Vertebræ*, as in *Man:* in *Apes* and *Monkeys* there are but three *Vertebræ.*

40. The *Os Coccygis* had but four *Bones*, and theſe not perforated, as 'tis in *Man:* In *Monkeys* there are more *Bones*, and they are perforated.

41. In the *Pygmie* there were but ſeven *Coſtæ veræ*; and the Extreams of the *Nothæ* were *Cartilaginous*; and the *Ribs* were articulated to the body of the *Vertebræ.* In *Apes* and *Monkeys* there are eight *Coſtæ veræ*; and the Extreams of the *Nothæ* are *oſſious*; and the *Articulation* is in the Interſtices of the *Vertebræ.*

42. The *Os Sterni* in the *Pygmie* was broad, as in a *Man:* in the *Monkey* 'tis narrow.

43. The *Bones* of the four *Fingers* much larger than in the *Ape-kind.*

44. The *Thigh-bone* in it's *Articulation*, and all other reſpects, like the *Humane.*

45. The *Patella* round, not long; ſingle, not double; as 'tis ſaid to be in *Apes.*

46. In the *Heel*, the *Tarſus*, and *Metatarſus*, the *Pygmie* was like a *Man.*

47. The *middle Toe* in the *Pygmie* was not the longeſt, as 'tis in the *Ape-kind.*

48. Theſe

48. Theſe *Muſcles*, *viz.* The *Obliquus Inferior Capitis*, the *Pyriformis* and *Biceps Femoris*, were like the *Humane*; whereas the ſame in *Apes* and *Monkeys* are different. And Note, That all the other *Muſcles* that are not otherwiſe ſpecified in the following *Catalogue*, were like the *Humane* alſo; but whether all the ſame *Muſcles* in *Apes* and *Monkeys* reſemble the *Humane*, could not be determined, for want of a Subject to compare them with, or Obſervations made by others.

The Orang-Outang *or* Pygmie *differ'd from a* Man, *and reſembled more the* Ape *and* Monkey-kind.

1. IN the littleneſs of it's Stature.
2. In the flatneſs of the *Noſe*, and the ſlit in the *Alæ Narium*.
3. In having a riſing Ridge of the *Cranium* under the *Eye-brows*.
4. In being more hairy behind, than before.
5. In having the *Thumb* ſo little, tho' larger than in the *Ape-kind*.
6. In having the *Palm* of the *Hand* longer and narrower.
7. In the length of the *Toes*.
8. In having the *Great Toe* ſet at a diſtance from the other, like a *Thumb*; and being *Quadrumanus*, like the *Ape-kind*.
9. In having the *Shoulder* and *Thigh* ſhorter.
10. In having the *Arms* longer.
11. In having no pendulous *Scrotum*.
12. In the largeneſs of the *Omentum*.
13. The *Gall-Bladder* long and ſlender.
14. The *Kidneys* rounder than in *Men*; and the *Tubuli Urinarij* different.
15. The *Bladder* of *Urine* longer.
16. In having no *Frænum* to the *Præputium*.
17. In having the *Bony Orbit* of the *Eye* ſo much protruded inwards, towards the Brain.
18. It had not thoſe two Cavities under the *Sella Turcica*, as in *Man*.
19. The *Proceſſus Maſtoides* and *Styloides* very ſmall, almoſt wanting.
20. The *Bones* of the *Noſe* flat.
21. In the Number of the *Teeth*, it reſembled the *Ape-kind*.
22. The *Vertebræ* of the *Neck* ſhort as in the *Ape-kind*, and flat before, not round; and their *Spines*, not *biſide*, as in *Man*.
23. In the firſt *Vertebra* of the *Neck* there was no *Spine*.
24. In an *Ape* the Tenth *Vertebra* of the *Back*; in a *Man* the Twelfth; in the *Pygmie* the Thirteenth *Vertebra*, *infra ſuprave ſuſcipitur*.

25. The

25. The *Os Sacrum* altogether like the *Ape-kind*, only in the number of the *Vertebræ*.

26. In having Thirteen *Ribs* on a ſide: a *Man* has but Twelve.

27. The *Bone* of the *Thumb* but ſmall.

28. The *Os Ilium* perfectly like the *Ape-kind*; being longer, narrower, and not ſo Concave as in *Man*.

29. The *Bones* of the *Toes* in their length, and the *Great Toe* in it's Structure imitated the *Ape-kind*.

30. Theſe *Muſcles* were wanting in the *Pygmie*, which are always found in *Men*; viz. *Occipitales*, *Frontales*, *Dilatatores Alarum Naſi*, ſeu *Elevatores Labij Superioris*, *Interſpinales Colli*, *Glutæi minimi*, *Extenſor Digitorum Pedis brevis*, and *Tranſverſalis Pedis*.

31. Theſe *Muſcles* did not appear in the *Pygmie*, and are ſometimes wanting too in *Humane Bodies*; viz. *Pyramidales*; *Caro muſculoſa Quadrata*; the long Tendon and fleſhy Belly of the *Palmaris*; *Attollens Auriculam*; and *Retrahens Auriculam*.

32. The *Elevatores Clavicularum* are in the *Pygmie* and the *Ape-kind*, and not in *Man*.

33. Theſe *Muſcles* reſembled thoſe in *Apes* and *Monkeys*, and differ'd from the *Humane*, viz. *Longus Colli*, *Pectoralis*, *Latiſſimus Dorſi*, *Glutæus maximus & medius*, *Pſoas magnus & parvus*, *Iliacus internus*, and the *Gaſterocnemius internus*.

34. Theſe *Muſcles* differ'd likewiſe from the *Humane*, viz. the *Deltoides*; the *Pronator Radij teres*; the *Extenſor Pollicis brevis*.

The Explanation of the Figures.

Figure the Firſt

REpreſents the Fore-parts of the *Orang-Outang* or *Pygmie*, in an Erect Poſture: Where you may obſerve the largeneſs of the *Head*; and broadneſs of the *Forehead*; the jutting out of the *Eye-brows*; the *Eyes* ſomewhat ſunk; the *Noſe* flat; the *Face* without hair and wrinkled; the *Teeth* like the *Humane*; the *Chin* ſhort; the *Ears* ſtanding off from the Head; the *Head* hairy; the *Shoulders* ſpread and large; the *Arms* and *Palms* of the *Hands* long; the *Nails* like thoſe in a *Man*; the *Hair* of the *Shoulder* inclining downwards, and that on the *Arms*, upwards; the *Fingers* large; the *Thumb* little; the *Breaſt* full cheſted and ſpread; the *Mammæ* or *Teats* placed as in *Man*; the *Belly* flat; the *Navil* as in *Man*; the *Penis* half-way covered with the *Prepuce*, which had no *Frænum*; no pendulous *Scrotum* here; the *Thighs* a little divaricated; the

Legs

Legs long and with *Calves*; the *Foot* like a *Hand*, having long *Toes*, and the *Great Toe* placed at a diſtance from the others, like a *Thumb*; the *Feet*, *Hands*, *Face*, *Ears*, and *Penis* without *Hair*; and all the Fore-parts of the Body rather leſs hairy than here repreſented; and the *Head* is too much ſhrunk down between the Shoulders.

The Second Figure

REpreſents the Hinder Parts of the *Pygmie* in an Erect Poſture likewiſe; where may be obſerved the *Globous Figure* of the *Head*; the ſtraitneſs of the *Back*; and that 'tis more hairy behind, than before; the *Fingers* of the *right Hand* are repreſented bending, to ſhew the *Action*, when it goes on all four; for then it places only the *Knuckles*, not the *Palms* of the *Hands* to the Ground. The *Sole* of the *left Foot*, by reaſon of the length of the *Toes*, and the ſetting on of the *Great Toe*, looks like the *Palm* of the *Hand*: but the *right*, having ſo long a *Heel*, and its *Toes* being hid, appears rather like a *Foot*, and upon occaſion performs the Office of both, either of a *Foot* or *Hand*. A little above the *Anus*, there is a black Spot, which repreſents a ſmall Protuberance of the *Os Coccygis*.

The Third Figure

REpreſents the *Muſcles* which appear on the Fore-part of the *Body*.

A. Part of the Coronary Suture.

B. The Diviſion of the *Cranium* made by the Saw.

c. The *Meatus Auditorius*.

d. Part of the *Os Jugale*, or *Zygomaticum*.

e. The *Parotid Gland*. * The *Salival Duct*.

f. The *Inferior* Maxillary *Gland*.

g. g. The *Claviculæ*.

h. Part of the *Spina Scapulæ*, as joyned to the *Clavicle*.

j. The Nerves, and Blood Veſſels which paſs to the Arm.

k. The Trunk of the *Nerve* in the left Arm, that goes to the Fingers.

l. A large Trunk of the *Arterie*, and a *Nerve* in the *Cubit*, as in *Humane* Bodies.

m. m. The Internal Protuberances of the *Os Humeri*.

n. The *Radius* of the left Arm made bare.

o. The *Umbilicus*, or *Navil*.

p. The *Linea Alba*.

q. q. The Tendons of the Oblique Muſcles, call'd *Linea Semilunaris*.

r. r. The

r. r. The *Tunica Vaginalis*, containing the *Vasa Præparantia*, &c.
s. s. The *Testes* or *Stones*.
t. The Blood Vessels of the Thigh, as they pass under the *Inguinal Glands*.
T. The *Os pubis*.
V. The *Ligamentum suspensorium Penis*.
u. The *Great Trochanter*.
w. The *Penis*.
x. x. The two *Patellæ*.
y. y. The internal and lower *Appendix* of the *Os Femoris*.
z. z. The *Tibia*.
N° 1. The *Musculus Temporalis*.
2. The *Orbicularis Palpebrarum*.
3. *Zygomaticus, seu distortor oris*.
4. *Elevator Labij superioris proprius*.
5. *Elevator Labij inferioris proprius*.
6. *Masseter*.
7. *Buccinator*.
8. 8. *Mastoideus*.
9. *Sternohyoideus*.
X. Part of the *Corocohyoideus*.
11. Part of the *Digastricus*, and it's Insertion into the *Chin*.
12. *Elevator Claviculæ*, which Muscle is not in Man, but in the *Pygmie* and *Apes*.
13. Part of the *Complexus Capitis*.
14. Part of the *Cucularis*.
15. 15. *Deltoides*.
15. 16. The *Biceps*.
17. The thin Tendinous Expansion of the *Biceps*, which involves the *Muscles* of the *Cubit*, as in Man.
18. Part of the *Brachæus internus*.
19. The Tendinous Elongation of the *Latissimus Dorsi*, which is found in the *Pygmie*, and in *Apes* and *Monkeys*; and not in *Man*; near it's Insertion into the Internal Protuberance of the *Os Humeri*.
20. 20. The *Pronator Radij teres*. That of the left side, being dissected from it's Insertion, and left at it's two Originals.
21. 21. The *Supinator Radij Longus*.
22. Part of the *Extensor Radialis*.
23. 23. The *Flexor Radialis*, that of the left Arm hanging at it's Insertion.
24. 24. The *Perforatus*; that of the left side hanging by its Tendons on the Palm of the Hand.
25. The *Perforans*; a little raised in the left Arm.
26. The Tendon of the *Flexor Ulnaris* as it runs to the *Carpus*.
27. A Tendinous Expansion, like the *Palmaris* in Man; but here was no Muscle, which is often seen in *Humane* Bodies.
28. 28. The *Abductor Pollicis*.

29. The *Flexor Secundi internodij Pollicis.*
30. *Abductor Indicis,*
31. 31. The *Lumbricales.*
32. The *Abductor minimi digiti.*
33. The *Pectoralis* ; that of the left ſide being raiſed, to ſhew the decuſſation of it's Fibres, as in Man.
34. Part of the *Muſculus ſubclavius.*
35. *Serratus minor anticus.*
36. 36. The *Intercoſtales externi.*
37. 37. The *Serratus major anticus* ; where 'tis indented with the *Muſculus obliquus deſcendens.*
38. 38. The *Obliquus deſcendens.*
39. The *Obliquus aſcendens*, as it appeared after the *deſcendens* was removed.
40. 40. The *Muſculi Recti*, with their *Paragraphs* or *Inſcriptions*, as in *Man*
41. 41. The *Muſculus communis Membranoſi.*
42. 42. The *Sartorius.*
43. 43. The *Rectus Femoris.*
44. 44. The *Vaſtus internus.*
45. Part of the *Vaſtus externus.*
46. 46. Parts of the *Triceps.*
47. 47. The *Pectinæus.*
48. The *Gracilis.*
49. 49. The *Tibialis Anticus.*
50. Part of the *Gaſterocnemius.*
51. Parts of the *Peronei.*
52. The *Extenſor Pollicis longus.*
53. The *Extenſor Pollicis brevis*, which differ'd in this *Animal*, from that in *Man.*
54. The Tendons of the *Extenſor Communis digitorum*, as they paſs between the *Interoſſij.*
55. The *Abductor minimi digiti.*
56. The *Pronator Radij Quadratus.*
57. Part of the *Supinator Radij brevis* ; at it's Inſertion to the *Radius.*

Figure the Fourth

Shews the *Muſcles* of the *Back-part* of the *Body.*

a. THE *Sagittal Suture.*
b. The *Lambdoidal Suture.*
c. c .c. The *Spines* of the *Superior Vertebræ* of the *Thorax*, and of one of th e *Inferior* of the *Neck.*

d. The

d. The Extremity of the *Clavicle*, where it is connected to the *Spine* of the *Scapula.*

e. The *Spine* of the *Scapula.*

f. The lower Angle of the *Scapula.*

g. The upper part of the *Os Humeri*, made bare, by raiſing the *Deltoid Muſcle.*

h. h. The *Acromion* or *Elbow.*

i. The External Protuberance of the *Os Humeri*, where the upper part of the *Radius*, is Articulated.

k. The *Ulna.*

l. l. The *Spines* of the *Back* and *Loins.*

m. m. The *Spines* of the *Oſſa Ilium.*

n. The *Os Coccygis.*

o. The *Great Trochanter.*

p. The Trunk of the Great *Crural Nerve.*

q. q. The *Oſſa Iſchij.*

r. r. r. The *Crural Nerves* in the Hams.

ſ. ſ. The *Os Calcis.*

t. t. The *Malleolus Internus.*

u. The *Malleolus externus.*

w. w. The *Great Toe.*

x. x. The four *little Toes.*

y. y. The *Pelvis* left open, by taking out the *Anus* with the *Rectum.*

N° 1.1.1.1. The *Muſculus Cucularis*, raiſed on the right ſide, and left faſtened to the *Occiput*, and to its Inſertion at the *Spine* of the *Scapula* and *Clavicle.*

2. Part of the *Splenius.*

3. Part of the *Maſtoideus.*

4. Part of the *Complexus.*

5. Part of the *Levator Scapulæ.*

6. *Rhomboides.*

7. Part of the *Serratus ſuperior poſticus.*

8. *Supraſpinatus.*

9. *Infraſpinatus.*

X. The *Teres minor*, which is larger here than in *Man.*

11. The *Teres major.*

12. The *Deltoides* raiſed.

13. 13. 13. 13. The *Latiſſimus Dorſi*, on the right ſide *in ſitu*, in the left, freed from it's Original and hanging down.

14. The *Biceps Externus ſeu Gemellus.*

15. The *Anchonæus.*

16. Part of the *Brachæus internus.*

17. Part of the *Biceps internus.*

18. The *Supinator Radij longus.*

19. The *Extenſor Carpi Radialis.*

20. 20. The *Extenſor Carpi Ulnaris.*
21. 21. The *Extenſor Communis digitorum*, on the right ſide hanging by its Tendons.
22. 22. The *Extenſor minimi digiti*, on the right ſide hanging down.
23. The *Extenſores Pollicis.*
24. The *Supinator Radij brevis.*
25. The *Abductor minimi digiti.*
26. The *Muſculi interoſſei.*
27. The *Abductor Pollicis.*
28. The *Longiſſimus Dorſi.*
29. The *Sacrolumbalis.*
30. 30. The *Intercoſtales.*
31. Part of the *Serratus major anticus.*
32. The *Serratus inferior poſticus.*
33. The *Glutæus maximus* on the left ſide *in ſitu*, on the right freed from its Origin, and left at it's Inſertion.
34. The *Glutæus medius.*
35. The *Pyriformis.*
36. The *Marſupialis ſ. Obturator.*
37. 37. Part of the *Triceps.*
38. 38. The *Gracilis.*
39. The *Semimembranoſus.*
40. The *Seminervoſus.*
41. The *Biceps femoris.*
42. Part of the *Vaſtus externus.*
43. 43. The *Gaſterocnemius externus*, that of the right ſide hanging to its Inſertion, at the *Os Calcis.*
44. The *Gaſterocnemius Internus.*
45. Part of the *flexor Digitorum perforans.*
46. The fleſhy part of the *flexor Digitorum perforatus.*
47. The *flexor Oſſis Pollicis*, together with the *Abductor Pollicis*, raiſed from it's Origin, and hanging down.
48. The *Muſculi Lumbricales.*

The fifth Figure

Repreſents the *Sceleton*, or the *Bones.*

1. THE *Os Frontis.*
2. The *Os Bregmatis.*
3. Part of the *Os Occipitis.*
4. *Os Temporale*, *ſeu Squammoſum.*
5. *Os Jugale*, *ſeu Zygomaticum.*
6. The firſt Bone of the *Upper Jaw.*
7. The *Os Lachrymale.*

8. The

8. The *Os Narium.*
9. The fourth Bone of the *Upper Jaw.*
10. The upper part of the *Os Sphænoides.*
11. The *lower Jaw.*
a. The *Proceſſus Condyloides* of the *lower Jaw.*
b. The *Proceſſus Corone.*
c. The *Coronal Suture.*
d. The *Sutura Oſſis Temporalis, ſeu Squammoſi.*
e. A *Foramen* for the paſſing the Nerves, and the Blood Veſſels in the *upper Jaw.*
f. A like *Foramen* in the *under Jaw.*
g. Where the *Skull* was ſawed, to take out the *Brain.*
h. The *Tranſverſe Proceſſes* of the *Vertebræ* of the *Neck.*
j. j. The *Oblique aſcending* and *deſcending Proceſſes* of the *Neck.*
12. 12. The *Vertebræ* of the *Neck.*
13. 13. The *Claviculæ*, or *Collar Bones.*
K. K. The Connection of the *Claviculæ*, to the *Spina Scapulæ.*
14. 14. The Internal parts of the *Scapula.*
l. l. The *Proceſſus Chorocoides Scapulæ.*
15. 15. The *Os Humeri.*
†. †. A *Sinus* for receiving the External Tendon of the head of the *Biceps.*
m. m. A *Sinus* for receiving the Prominence (*n. n.*) of the *Ulna* upon bending the *Arm.*
16. 16. The *Ulna.*
o. Part of the *Olecranon* of the *Ulna* of the left *Arm.*
17. 17. The *Radius.*
p. A Prominence of the *Radius*, to which the internal great Tendon of the *Muſculus Biceps* is inſerted.
18. 18. The Bones of the *Carpus*, which in a great meaſure were *Cartilaginous.*
19. 19. The Bones of the *Metacarpus.*
20. 20. The Bones of the *Thumb.*
21. 21. The Bones of the *Fingers.*
22. 22. The *Sternum* or *Os Pectoris.*
23. The *Cartilago Enſiformis.*
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. The Thirteen *Ribs* of each ſide.
24. The *Vertebræ* of the *Back.*
25. The *Vertebræ* of the *Loins.*
q. The *Tranſverſe Proceſſes* of the *Vertebræ* of the *Loins.*
r. The *Foramina* for the paſſage of the Nerves.
26. The *Os Sacrum.*
27. The *Os Coccygis.*
28. 28. The *Os Ilium.*
29. The *Os Pubis.*
30. The *Os Iſchij.*
s. s. The *Cartilaginous* Conjunction of the *Os Ilium* with the *Os Pubis* and *Iſchij* at the *Acetabulum.*

t. t. The

t. t. The large *Foramen* of the *Os Pubis* and *Ischij.*
31. 31. The *Os femoris.*
v. v. The Head of the *Os femoris* in the *Acetabulum.*
w. w. The *Great Trochanter*, which was *Cartilaginous.*
X. The *lesser Trochanter.*
32. 32. The *Patella*, which was *Cartilaginous.*
33. 33. The *Tibia.*
34. 34. The *Fibula.*
35. 35. The *Os Calcis.*
36. 36. The *Astragalus.*
37. The *Os Cubiforme.*
38. The *Os Naviculare, seu Cuneiforme majus.*
39. The *Ossa Cuneiformia minora.*
40. 40. The *Ossa Metatarsi.*
41. 41. The *Ossa Digitorum.*
42. 42. The Bones of the *Great Toe.*
y. The *Malleolus externus.*
z. The *Malleolus internus.*
* * * * Signifie, that those Parts were *Cartilaginous.*

The sixth Figure

Represents the *Stomach, Intestines, Pancreas, Spleen, Liver*, &c.

A. A. THE back side of the *Stomach*, it being turned upwards.
B. Part of the *Oesophagus* or *Gullet*, before it joyns with the upper or left *Orifice* of the *Stomach.*
C. The right *Orifice* of the *Stomach*, or *Pylorus.*
a. a. The Extremities of the *Vasa Brevia*, which pass between the *Spleen* and the *Stomach.*
b. b. &c. Divers *Lymphatick Glands* on the *Stomach.*
D. The *Superior Coronary Arteries* and *Veins*, and their Ramifications.
E. E. The *Inferior Coronary Blood Vessels* of the *Stomach*, which sends Branches also to the *Omentum.*
F. F. The *Omentum* or *Caul* turned up, to shew it's lower *Leaf.*
G. G. The *Liver*, like the *Humane*; and not divided into *Lobes*, as 'tis in *Apes.*
c. A small Lobe of the *Liver* at the entrance of the *Vena Porta.*
d The *Fissure* or Cleft in the *Liver* at the entrance of the *Umbilical Vein.*
f. f. The *Gall Bladder.*
H. The beginning of the *Duodenum.*
I. I. The *Pancreas.*

g. g. The

g. g. The Blood Veſſels of the *Spleen*, eſpecially a Branch of the *Vena Porta*.

K. K. The *Spleen*.

L. L. L. The *Small Guts*.

M. The *Ileon* juſt before it enters the *Colon*.

N. The beginning of the *Colon*.

h. h. One of the Ligaments of the *Colon*.

O. O. The *Cæcum*, or *Appendicula Vermiformis*.

P. P. The *Colon* in its whole Progreſs, to the *Rectum*.

j. j. Part of the *Meſenterie*.

k. k. The Glands of the *Meſenterie*.

l. That part of the *Meſenterie*, which is connected to the *Cæcum*, or the *Meſocæcum*.

m. The *Meſocolon*, or that Part of the *Meſenterie* that is faſtened to the *Colon*.

Q. The upper part of the *Inteſtinum Rectum*.

The ſeventh Figure

Shews the *Organs* of GENERATION.

A. THE back part of the *Bladder* of *Urine*, the greateſt part of the *Bladder* being cut off.

B. The *Penis*.

C. C. The two *Ureters*.

D. D. The *Vaſa Deferentia*.

E. E. The *Veſiculæ Seminales*.

F. The *Glandulæ Proſtatæ*, or *Corpus Glandoſum*.

G. The *Bulb* of the *Cavernous Body* of the *Urethra*, covered with the *Muſculus accelerator Urinæ ſeu Spermatis*.

a. a. The two Productions of the laſt mentioned *Muſcle*, which are inſerted to the two *Cavernous Bodies* of the *Penis*, on each ſide the *Urethra*, by which means that part of the *Urethra* is compreſt, and it's Contents forced out.

b. b. The beginning of the two *Cavernous Bodies* of the *Penis*.

H. The Cavernous Body of the *Urethra*.

j. One of the *Tranſverſe Muſcles* of the *Penis*, call'd the *Third Pair*.

K. K. The *Muſculi Directores Penis*.

The Eighth Figure

Exhibits part of the *Muſculus Latiſſimus Dorſi* diſſected.

A. A. THAT part of the *Muſcle* that lies on the *Back*, as in *Humane Bodies.*

B. It's *Tendon* which is inſerted to the *Os Humeri*, as in *Men.*

c. The Tendinous Extremity of a fleſhy Production of this *Muſcle*, which is implanted on the Internal Protuberance of the *Os Humeri* of this *Animal*; as 'tis alſo in *Apes* and *Monkeys.*

The ninth Figure

Repreſents the *Urinary Parts* and *Organs* of *Generation.*

A. THE left *Kidney* entire.

a. a. The *Membrana Adipoſa*, partly freed from the *Kidney*, and turned back.

B. The *Right Kidney* opened, to ſhew its *Glandulous* Subſtance, and *Urinary Tubes*, and the *Pelvis.*

b The *Tubuli Urinarij* which ariſe from the *Glandulous* Subſtance, and like Lines drawn from a *Circumference* to a *Center*, paſs to the *Fimbria* or Edge *c c*, in *Man* to the ſeveral *Papillæ*, where their Orifices open and empty themſelves into the *Pelvis.*

c. c. The ſaid *Fimbria*, of a Semicircular Figure, where the Extreams of the *Urinary Tubes* diſcharge the *Urine* into the *Pelvis*, or rather *Funnel* of the *Kidneys.*

d. The *Pelvis* or *Infundibulum*: For being large here in the *Kidney*, and running into a long ſlender Stem in the *Ureter*, it more properly repreſents a *Funnel*, and ſerves for the Conveying the *Urine* thence into the *Bladder.*

C. C. The *Glandulæ Renales.*

D. D. The Deſcending Trunk of the *Arteria Magna* or *Aorta*, below the *Diaphragm.*

d. The *Cæliac Arterie.*

ð. The *Arteria Meſenterica ſuperior.*

g The *Arteria Meſenterica inferior.*

E. The Deſcending Trunk of the *Vena Cava.*

F. F. The *Emulgent Arteries.*

f. f. The *Emulgent Veins.*

G. G. The

G. G. The *Ureters.*
H. The *Bladder* of *Urine.*
h. h. The *Spermatick Veins* which diſcharge themſelves into the *Vena Cava*, and the left *Emulgent*, as in *Man.*
j. The *Spermatick Arteries*, as they ariſe from the fore-part of the Trunk of the *Aorta.*
J. J. The *Vaſa Præparantia Pampini-formia, ſeu Corpora Pyramidalia.*
K. K. The *Teſtes* or *Stones*, which appear here flaccid, having been kept ſome time, before the *figure* was taken.
L. L. The *Epididymis*, making ſeveral Convolutions on the body of the *Teſtes.*
M. Part of the *Cremaſter Muſcle.*
N. N. The *Vaſa Deferentia.*
O. O. The *Veſiculæ Seminales.*
P. The *Proſtates* or *Corpus Glandoſum.*
Q. The *Muſculus Erector Penis* of the right ſide.
R. The upper part or *Dorſum Penis.*
S. The *Corpora Cavernoſa Penis*, cut tranſverſe.
T. The *Urethra.*
k. k. The main Trunk of the *Iliac Arterie* and *Vein.*
l. l. The *Umbilical Arteries.*
m. m. The *Arterie* that goes to the *Penis.*
n. n. The *Arterie* that goes to the *Bladder* of Urine.
o. The internal *Iliac Vein* and *Arterie.*
p. The external *Iliac Vein* and *Arterie.*
q. The *Vena Pudenda ſeu Penis.*
r. r. The *Nerves* of the *Penis.*
ſ. ſ. The *Arteries* of the *Penis.*

The tenth Figure

Demonſtrates the Parts of the *Thorax* with the *Arteria Aſpera* and *Larynx.*

A. THE fore-part of the *Os Hyoides.*
a. a. Its two ends, that are connected to the two *Superior* long *Proceſſes* of the *Cartilago Scutiformis.*
B. The *Epiglottis.*
C. The *Cartilago Scutiformis.*
b. The Prominent part of the *Annulary Cartilage.*
D. D. The *Muſculi Hyothyroidei.*
E. E. The *Muſculi Sternothyroidei.*
c. c. The *Muſculi Cricothyroidei.*
F. The *Arteria Aſpera*, or *Wind-pipe.*
G. It's diviſion, where it paſſes to the right and left *Lobes* of the *Lungs.*
H. H. The *Lungs.*

J. The *Cone* of the *Heart*.

K. The right *Ventricle* of the *Heart* here opened, ſo that part of the *Polypus* contained there, came in view.

L. Part of the *Pericardium*, on the *Baſis* or upper part of the *Heart*.

M. M. The *Thymus*, lying on the *Pericardium*.

N. The *Mediaſtinum* freed from the *Sternum*, and turn'd to the right ſide.

O. O. The two *Subclavian Arteries*.

P. The *Carotid Arteries*.

The eleventh Figure

Shews the *Polypus* or Coagulated Blood found in the *left Ventricle* of the *Heart*.

A. THAT part contained in the *Ventricle*.

B. Three Impreſſions, formed by the *Semilunary Valves*.

C. That part, that lay in the *Aorta*.

D. That part that paſſed into the deſcending Trunk of the *Aorta*.

E. Thoſe *Ramuli* of it that lay in the aſcendent Branches of the *Aorta*.

The twelfth Figure

The *Polypus* found in the right *Ventricle* of the *Heart*.

A. THAT part contained in the *Ventricle*.

B. The Impreſſions made by the *Valvulæ ſigmoides*.

C. The Branches leading to the right and left *Lobes* of the *Lungs*.

The thirteenth Figure

Repreſents the *Baſis* of the *Brain* with the *Medulla Oblongata*, and the *Nerves* and *Arteries* cut off.

A. A. THE two *anterior* or fore *Lobes* of the *Brain*.

B. B. The two *poſterior* or hinder *Lobes* of the *Brain*.

a. a. Two depreſſions in the fore *Lobes* cauſed by the riſing of the *Frontal* bone, that compoſes the upper part of the *Orbit* of the *Eye*; which in this *Animal*, and in *Monkeys*, is more eminent than in *Man*.

b. b. The diviſion of the right and left *Hemiſphere* of the *Brain*, where the *Falx* is placed. This fore-part of the *Brain* in this *Animal* appeared ſomewhat flatter than in *Man*.

C. C. The *Cerebellum*.

D. The *Principium Medullæ Spinalis*, or that part of the *Caudex Medullaris*,

dullaris, where the *Corpora Pyramidalia* and *Olivaria* are placed, as in an *Humane Brain.*

E. E. The *Protuberantia Annularis*, or *Pons Verolij.*

e. e. The *Carotid Arteries.*

f. f. The *Vertebral Arteries.*

g. The *Cervical Arterie.*

h. The *Communicant* Branches between the *Cervical* and *Carotid Arteries.*

j. A ſmall *Arterie* deſcending down the *Spinal Marrow.*

k. The *Infundibulum.*

l. l. The *Glandulæ duæ albæ pone Infundibulum*, , or rather two *Medullary Protuberances* there.

m. m. Parts of the *Crura Medullæ Oblongatæ* before they unite under the *Pons Verolij*, or *Annular Protuberance.*

1. The *Olfactory*, or firſt pair of Nerves.
2. The *Optick*, or ſecond pair of Nerves.
3. The *Nervi Oculorum motorij*, or third pair of Nerves.
4. The *Pathetick*, or fourth pair of Nerves.
5. The fifth pair of Nerves.
6. The ſixth pair of Nerves.
7. The *Auditory*, or ſeventh pair of Nerves.
8. The *Par Vagum*, or eighth pair of Nerves.
9. The ninth pair of Nerves.
10. The tenth pair of Nerves, which may be reckoned rather the firſt pair of the *Neck.*

* * The *Nervus acceſſorius*, that goes to the eighth pair, or *Par Vagum.*

The fourteenth Figure.

Repreſents the inward Parts of the *Brain*, as divided by an *Horizontal Section*; where the *Baſis* of the *Brain* is reflected upwards.

A. A. PArts of the hinder *Lobes* of the *Brain.*

B. B. The upper part of the *Brain* next it's *Hemiſpheres*, divided from the lower.

C. C. The lower part next the *Baſis*, reflected or turned up.

a. a. The *Cortical* or *Cinericious* part of the *Brain*, which is *Glandulous.*

b. b. The *Medullary* part, that runs up between the *Cortical*, and is *Nervous.*

D. The *Corpus Tranſverſale.*

E. The *Fornix.*

e. e. The *Crura Fornicis.*

f. The two *Roots* of the *Fornix.*

F. F. The two firſt *Ventricles* of the *Brain.*

G. G. Parts of the *Corpora Striata*, entire.

g. g. The *Striæ* as they appear in this Section in the *Corpora Striata* in the lower part of the *Brain.*

h. h. The ſame *Striæ*, in the upper part of the *Brain.*

H. H. The *Plexus Choroides.*

J. J. The *Thalami Nervorum Opticorum.*

j. The *Plexus Choroides* continued.

K. K. The *Cerebellum* divided perpendicularly, to ſhew the ramifications of the *Medullary* part in the *Cortical.*

k. The *Foramen anterius* that leads to the Cavity under the *Protuberantiæ orbiculares.*

l. The *Glandula Pinealis.*

m. The *Nates.*

n. The *Teſtes.*

o. The *Commiſſure* of the *Medullary Proceſſes* of the *Cerebellum* and *Teſtes.*

p. The fourth *Ventricle* opened.

q. q. The *Acceſſory Nerves.*

10. The tenth pair of Nerves.

r. The *Foramen poſterius* or *inferius*, that leads to the Cavity under the *Protuberantiæ orbiculares.*

s. The *Rima* or *Foramen*, that leads to the *Infundibulum.*

The fifteenth Figure

Is a Copy of the *Figure* that *Nicholaus Tulpius* gives of the *Orang-Outang* that was brought to *Holland* from *Angola.*

The ſixteenth Figure

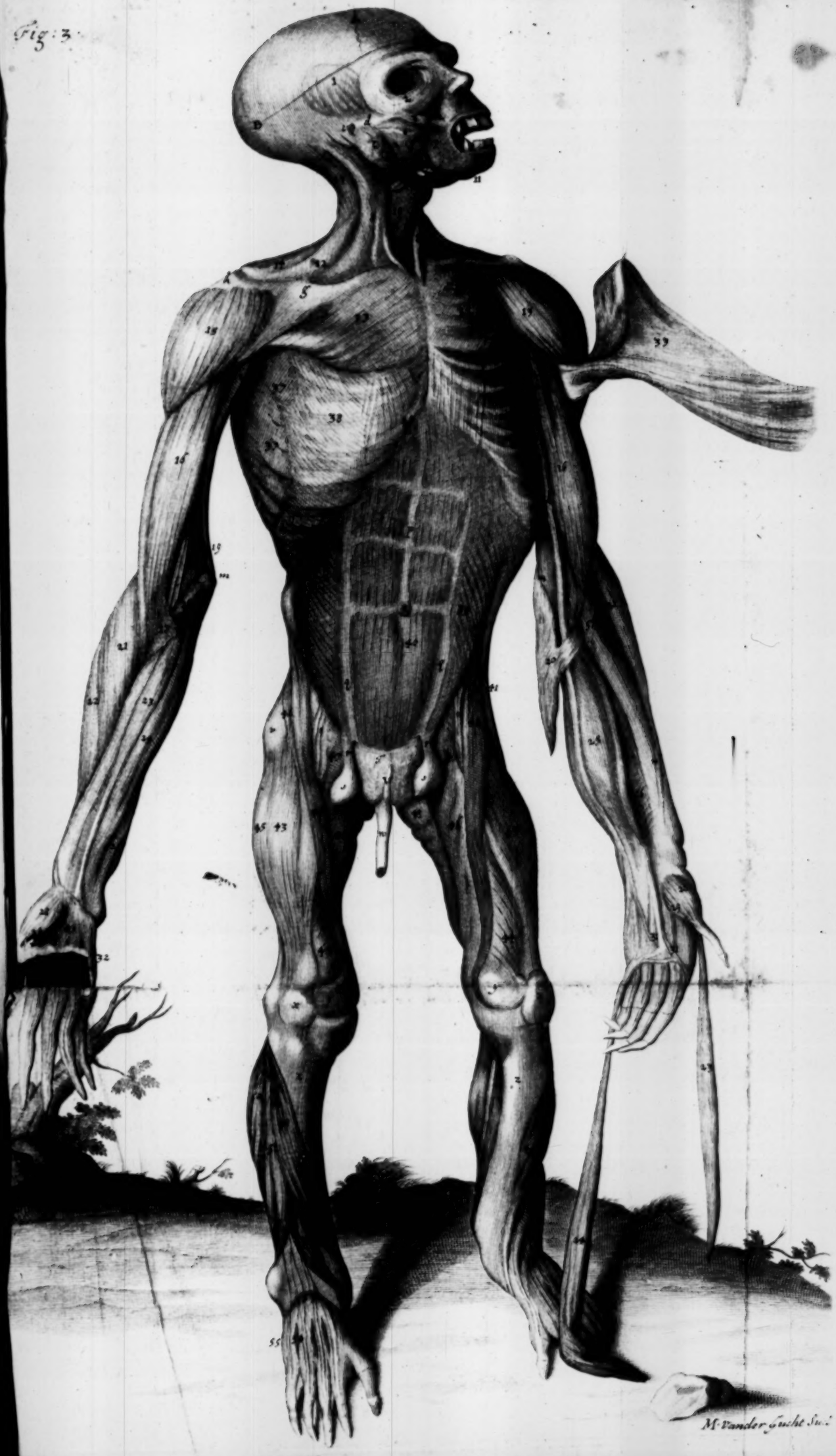
Repreſents the *Figure* that *Jacob. Bontius* gives of the *Orang-Outang* in *Piſo.*

The ſeventeenth Figure.

Is taken out of *Geſner*, which he tells us, he met with in a *German* Book, wrote about the *Holy Land.*

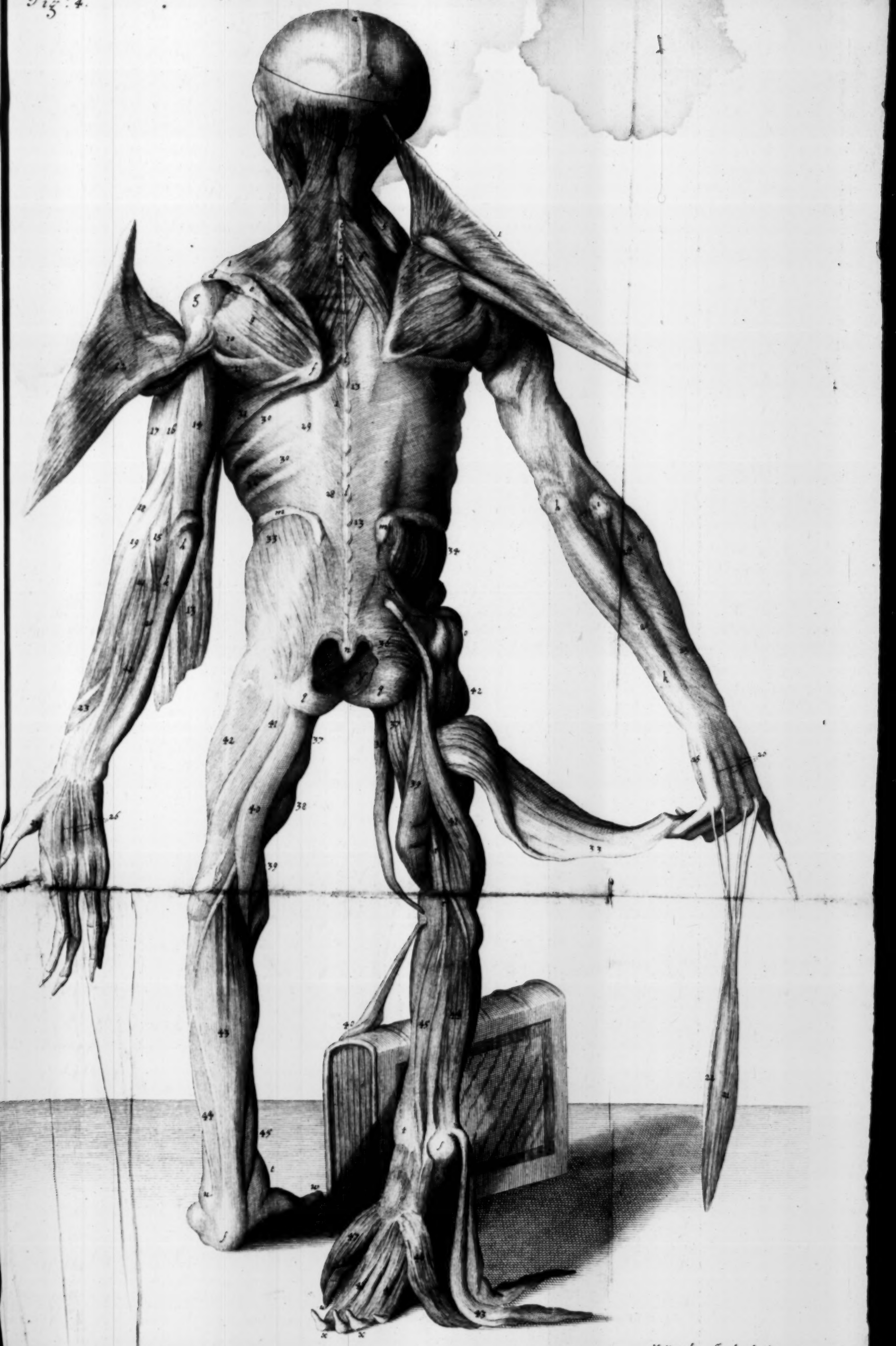
FINIS.

Fig: 3.



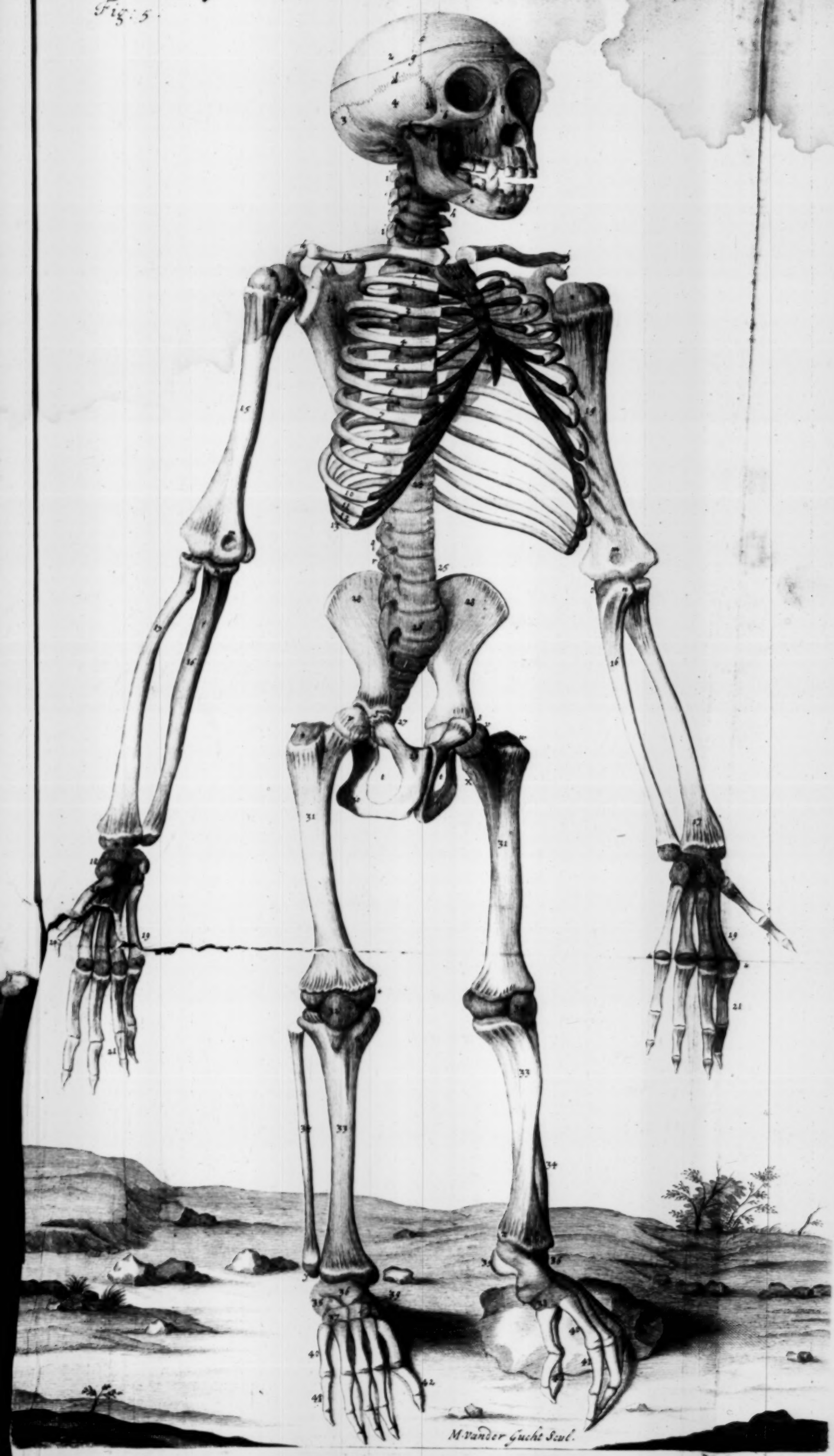
M. Vander Gucht Sculp.

Fig: 4.



M. Vander Gucht Scul:

Fig: 5.



M. Vander Gucht Scul.

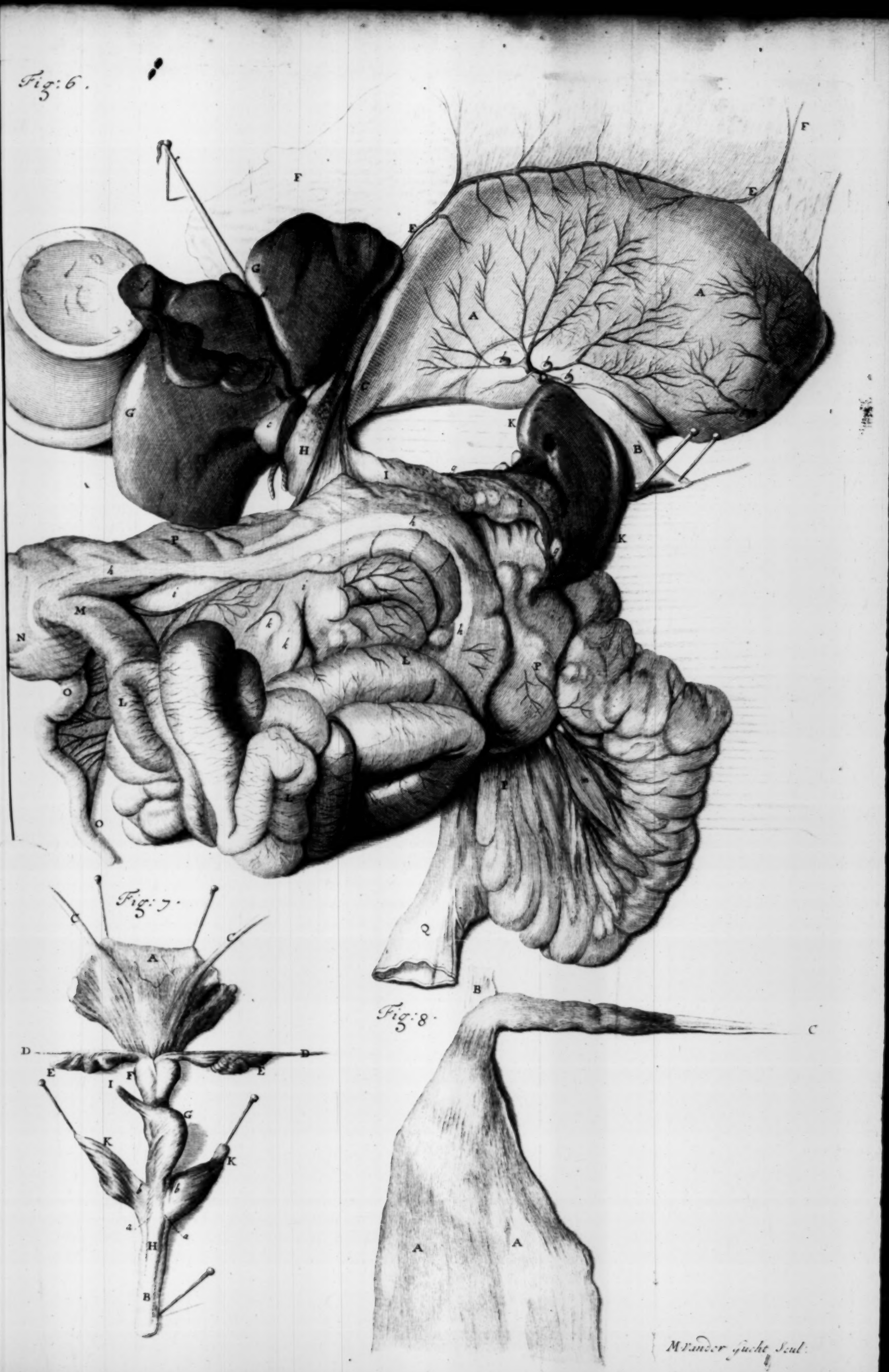


Fig: 6.
Fig: 7.
Fig: 8.
M. Vander Gucht Sculp.

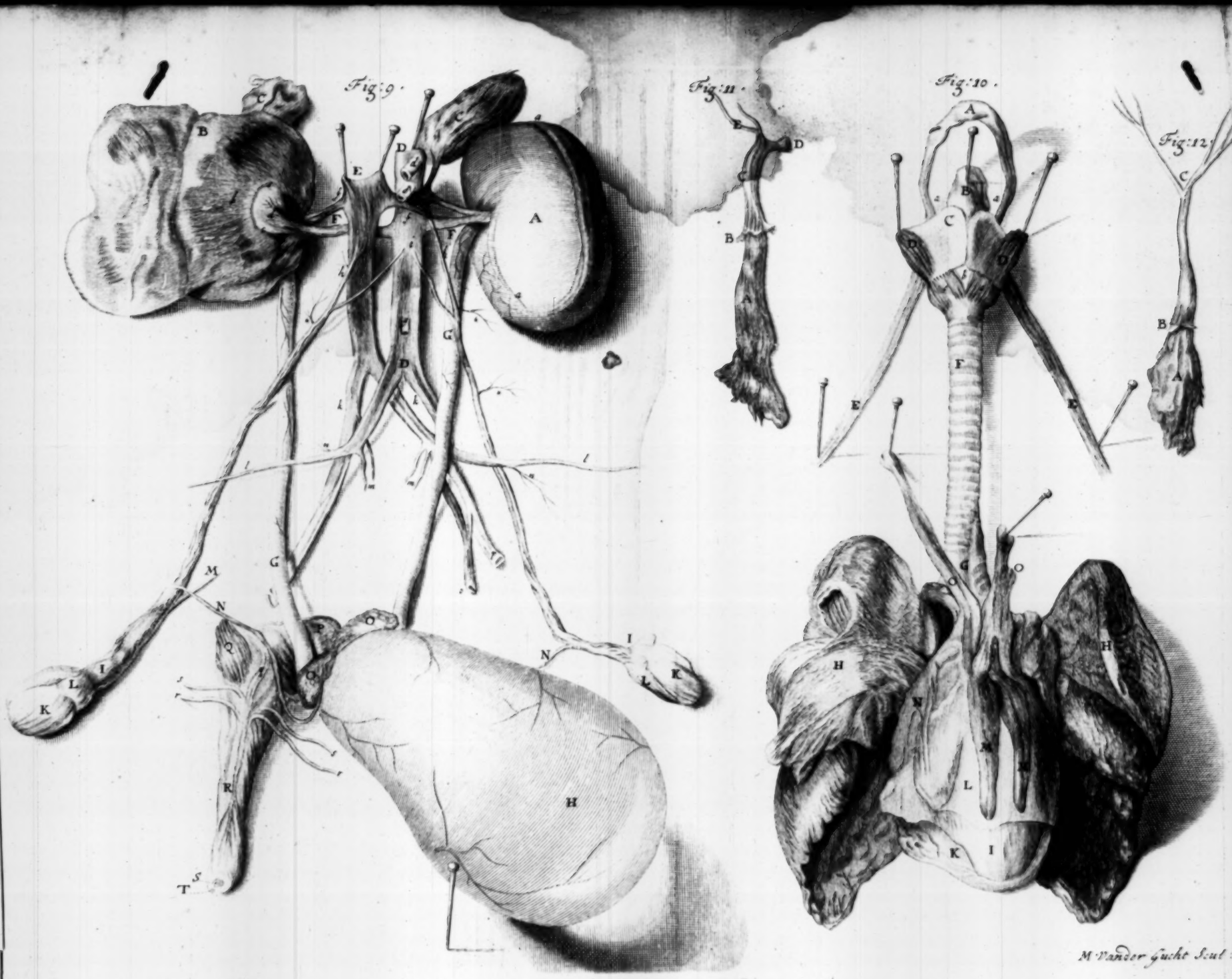
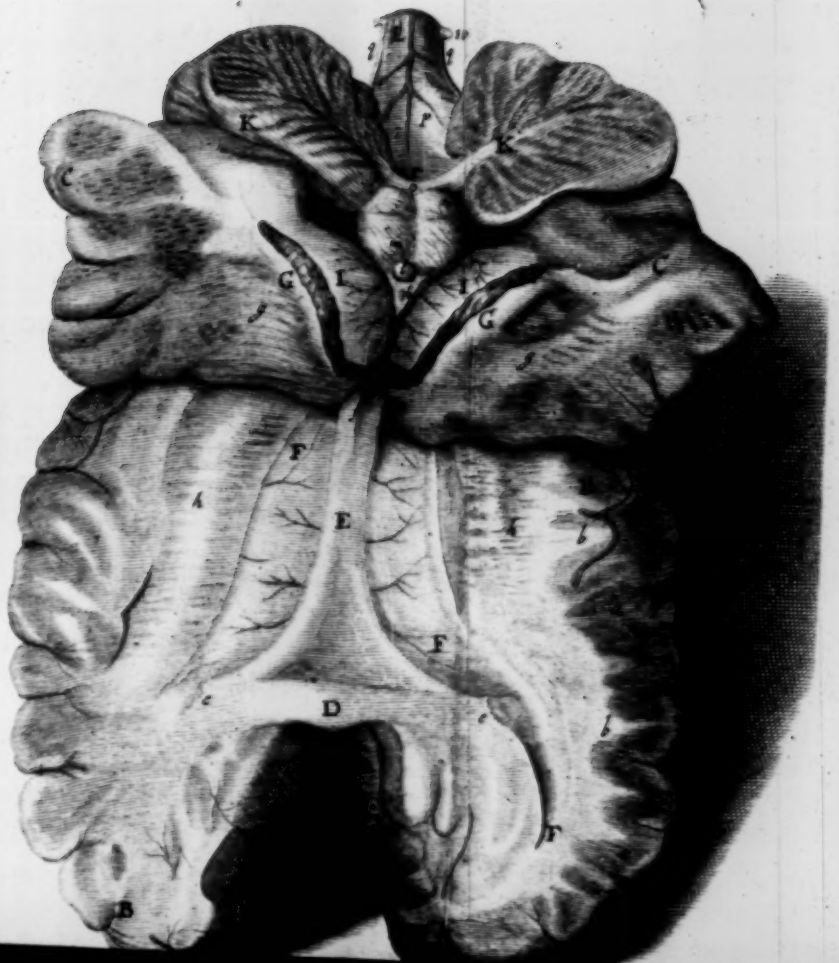


Fig: 9.
Fig: 11.
Fig: 10.
Fig: 12.
M. Vander Gucht Sculp.

Fig. 13.

Fig. 14.



A PHILOLOGICAL ESSAY

Concerning the

PYGMIES,

THE

CYNOCEPHALI,

THE

SATYRS and SPHINGES

OF THE

ANCIENTS,

Wherein it will appear that they were all either APES or MONKEYS; and not MEN, as formerly pretended.

By *Edward Tyson* M. D.

A

Philological Eſſay

Concerning the

PYGMIES

OF THE

ANCIENTS.

HAVING had the Opportunity of Diſſecting this remarkable Creature, which not only in the *outward ſhape* of the Body, but likewiſe in the ſtructure of many of the Inward Parts, ſo nearly reſembles a *Man*, as plainly appears by the *Anatomy* I have here given of it, it ſuggeſted the Thought to me, whether this ſort of *Animal*, might not give the Foundation to the Stories of the *Pygmies?* and afford an occaſion not only to the *Poets*, but *Hiſtorians* too, of inventing the many *Fables* and wonderful and merry Relations, that are tranſmitted down to us concerning them? I muſt confeſs, I could never before entertain any other Opinion about them, but that the whole was a *Fiction:* and as the firſt Account we have of them, was from a *Poet*, ſo that they were only a Creature of the Brain, produced by a warm and wanton Imagination, and that they never had any Exiſtence or Habitation elſewhere.

In this Opinion I was the more confirmed, becauſe the moſt diligent Enquiries of late into all the Parts of the inhabited World, could never diſcover any ſuch *Puny* diminutive *Race* of *Mankind.* That they ſhould be totally deſtroyed by the *Cranes*, their Enemies, and not a Straggler here and there left remaining, was a Fate, that even thoſe *Animals* that are conſtantly preyed upon by others, never undergo. Nothing therefore appeared to me more Fabulous and Romantick, than their *Hiſtory*, and the Relations about them, that *Antiquity* has delivered to us. And

not

not only *Strabo* of old, but our greateſt Men of Learning of late, have wholly exploded them, as a meer *figment*; invented only to amuſe and divert the Reader with the Comical Narration of their Atchievements, believing that there were never any ſuch Creatures in Nature.

This Opinion had ſo fully obtained with me, that I never thought it worth the Enquiry, how they came to invent ſuch Extravagant Stories: Nor ſhould I now, but upon the Occaſion of Diſſecting this *Animal:* For obſerving that 'tis call'd even to this day in the *Indian* or *Malabar* Language, *Orang-Outang*, *i.e.* a *Man* of the *Woods*, or *Wild-men*; and being brought from *Africa*, that part of the World, where the *Pygmies* are ſaid to inhabit; and it's preſent *Stature* likewiſe tallying ſo well with that of the *Pygmies* of the Ancients; theſe Conſiderations put me upon the ſearch, to inform my ſelf farther about them, and to examine, whether I could meet with any thing that might illuſtrate their *Hiſtory*. For I thought it ſtrange, that if the whole was but a meer Fiction, that ſo many ſucceeding Generations ſhould be ſo fond of preſerving a *Story*, that had no Foundation at all in Nature; and that the *Ancients* ſhould trouble themſelves ſo much about them. If therefore I can make out in this *Eſſay*, that there were ſuch *Animals* as *Pygmies*; and that they were not a *Race* of *Men*, but *Apes*; and can diſcover the *Authors*, who have forged all, or moſt of the idle Stories concerning them; and ſhew, how the Cheat in after Ages has been carried on, by embalming the Bodies of *Apes*, then expoſing them for the *Men* of the Country, from whence they brought them: if I can do this, I ſhall think my time not wholly loſt, nor the trouble altogether uſeleſs, that I have had in this Enquiry.

My Deſign is not to juſtifie all the Relations that have been given of this *Animal*, even by Authors of reputed Credit; but, as far as I can, to diſtinguiſh Truth from Fable; and herein, if what I aſſert amounts to a Probability, 'tis all I pretend to. I ſhall accordingly endeavour to make it appear, that not only the *Pygmies* of the Ancients, but alſo the *Cynocephali*, and *Satyrs* and *Sphinges* were only *Apes* or *Monkeys*, not *Men*, as they have been repreſented. But the Story of the *Pygmies* being the greateſt Impoſture, I ſhall chiefly concern my ſelf about them, and ſhall be more conciſe on the others, ſince they will not need ſo ſtrict an Examination.

We will begin with the Poet *Homer*, who is generally owned as the firſt Inventor of the Fable of the *Pygmies*, if it be a Fable, and not a true Story, as I believe will appear in the Account I ſhall give of them. Now *Homer* only mentions them in a *Simile*, wherein he compares the Shouts that the *Trojans* made, when they were going to joyn Battle with the *Græcians*, to the great Noiſe of the *Cranes*, going to fight the *Pygmies:* he ſaith (*a*),

(a) *Homer. Iliad.* lib. 3. ver. 4.

Ἅι τ' ἐπεὶ οὖν χειμῶνα φύγον, καὶ ἀθέσφατον ὄμβρον
Κλαγγῇ ταί γε πέτονται ἐπ' ὠκεανοῖο ῥοάων
Ἀνδράσι πυγμαίοισι φόνον καὶ κῆρα φέρουσαι. i. e.

Quæ simul ac fugere Imbres, Hyememque Nivalem
Cum magno Oceani clangore ferantur ad undas
Pygmæis pugnamque Viris, cædesque ferentes.

Or as *Helius Eobanus Hessus* paraphrases the whole (*b*).

Postquam sub Ducibus digesta per agmina stabant
Quæque suis, Equitum turmæ, Peditumque Cohortes,
Obvia torquentes Danais vestigia Troës
Ibant, sublato Campum clamore replentes:
Non secus ac cuneata Gruum sublime volantum
Agmina, dum fugiunt Imbres, ac frigora Brumæ,
Per Cœlum matutino clangore feruntur,
Oceanumque petunt, mortem exitiumque cruentum
Irrita Pigmæis moturis arma ferentes.

By ἀνδράσι πυγμαίοισι therefore, which is the Passage upon which they have grounded all their fabulous Relations of the *Pygmies*, why may not *Homer* mean only *Pygmies* or *Apes* like *Men*. Such an Expression is very allowable in a *Poet*, and is elegant and significant, especially since there is so good a Foundation in Nature for him to use it, as we have already seen, in the *Anatomy* of the *Orang-Outang*. Nor is a *Poet* tied to that strictness of Expression, as an *Historian* or *Philosopher*; he has the liberty of pleasing the Reader's Phancy, by Pictures and Representations of his own. If there be a becoming likeness, 'tis all that he is accountable for. I might therefore here make the same *Apology* for him, as *Strabo* (*c*) do's on another account for his *Geography*, οὐ γὰρ κατ' ἄγνοιαν τῶν τοπικῶν λέγεται, ἀλλ' ἡδονῆς καὶ τέρψεως χάριν, That he said it, not thro' Ignorance, but to please and delight: Or, as in another place he expresses himself (*d*), οὐ γὰρ κατ' ἄγνοιαν τῆς ἱστορίας ὑπολήπτεον γένεσθαι τοῦτο, ἀλλὰ τραγῳδίας χάριν. *Homer* did not make this slip thro' Ignorance of the true *History*, but for the Beauty of his *Poem*. So that tho' he calls them *Men Pygmies*, yet he may mean no more by it, than that they were like *Men*. As to his Purpose, 'twill serve altogether as well, whether this bloody Battle be fought between the *Cranes* and *Pygmæan Men*, or the *Cranes* and *Apes*, which from their Stature he calls *Pygmies*, and from their shape *Men*; provided that when the *Cranes* go to engage, they make a mighty terrible noise, and clang enough to fright these little *Wights* their mortal Enemies. To have called them only *Apes*, had been

(b) *Homeri Ilias Latino Carmine reddita ab Helio Eobano Hesso.* (c) *Strabo Geograph.* lib. 1. p. m. 25.
(d) *Strabo ibid.* p. m. 30.

flat and low, and lessened the grandieur of the Battle. But this *Periphrasis* of them, ἄνδρες πυγμαῖοι, raises the Reader's Phancy, and surprises him, and is more becoming the Language of an *Heroic Poem.*

But how came the *Cranes* and *Pygmies* to fall out? What may be the Cause of this Mortal Feud, and constant War between them? For *Brutes*, like *Men*, don't war upon one another, to raise and encrease their Glory, or to enlarge their Empire. Unless I can acquit my self herein, and assign some probable Cause hereof, I may incur the same Censure as *Strabo* (e) passed on several of the *Indian Historians*, ἐνεκαίνισαν δὲ καὶ τὴν Ὁμηρικὴν τῶν Πυγμαίων γερανομαχίαν τριπιθάμεις εἰπόντες, for reviewing the *Homerical* Fight of the *Cranes* and *Pygmies*, which he looks upon only as a fiction of the *Poet*. But this had been very unbecoming *Homer* to take a *Simile* (which is designed for illustration) from what had no Foundation in Nature. His *Betrachomyomachia*, 'tis true, was a meer Invention, and never otherwise esteemed: But his *Geranomachia* hath all the likelyhood of a true Story. And therefore I shall enquire now what may be the just Occasion of this Quarrel.

Athenæus (f) out of *Philochorus*, and so likewise *Ælian* (g), tell us a Story, That in the Nation of the *Pygmies* the Male-line failing, one *Gerana* was their Queen; a Woman of an admired Beauty, and whom the Citizens worshipped as a *Goddess*; but she became so vain and proud, as to prefer her own, before the Beauty of all the other *Goddesses*, at which they grew enraged; and to punish her for her Insolence, *Athenæus* tells us that 'twas *Diana*, but *Ælian* saith 'twas *Juno* that transformed her into a *Crane*, and made her an Enemy to the *Pygmies* that worshipped her before. But since they are not agreed which *Goddess* 'twas, I shall let this pass.

Pomponius Mela will have it, and I think some others, that these cruel Engagements use to happen, upon the *Cranes* coming to devour the *Corn* the *Pygmies* had sowed; and that at last they became so victorious, as not only to destroy their Corn, but them also: For he tells us (†), *Fuere interiùs Pygmæi, minutum genus, & quod pro satis frugibus contra Grues dimicando, defecit.* This may seem a reasonable Cause of a Quarrel; but it not being certain that the *Pygmies* used to sow *Corn*, I will not insist on this neither.

Now what seems most likely to me, is the account that *Pliny* out of *Megasthenes*, and *Strabo* from *Onesicritus* give us; and, provided I be not obliged to believe or justifie *all* that they say, I could rest satisfied in great part of their Relation: For *Pliny* (h) tells us, *Veris tempore universo*

(e) *Strabo Geograph.* lib. 2. p. m. 48. (f) *Athenæi Deipnosoph.* lib. 9. p. m. 393. (g) *Ælian. Hist. Animal.* lib. 15. cap. 29. (†) *Pomp. Mela de situ Orbis*, lib. 3. cap. 8. (h) *Plinij Hist. Nat.* lib. 7. cap. 2. p. m. 13

agmine

agmine ad mare descendere, & Ova, Pullosque earum Alitum consumere: That in the Spring-time the whole drove of the *Pygmies* go down to the Sea side, to devour the *Cranes* Eggs and their young Ones. So likewise *Onesicritus* (i), Πρὸς δὲ τοὺς τριαπιθάμους πόλεμον εἶναι ταῖς Γεράνοις (ὃν καὶ Ὅμηρον δηλοῦν) καὶ τοῖς Πέρδιξιν, οὓς χηνομεγέθεις εἶναι· τούτους δ' ἐκλέγειν αὐτῶν τὰ ᾠά, καὶ φθείρειν· ἐκεῖ γὰρ ᾠοτοκεῖν τὰς Γεράνους· διόπερ μηδαμοῦ μηδ' ᾠὰ εὑρίσκεσθαι Γεράνων, μητ' οὖν νεόττια· i. e. *That there is a fight between the* Pygmies *and the* Cranes *(as* Homer *relates) and the* Partridges, *which are as big as* Geese; *for these* Pygmies *gather up their Eggs, and destroy them; the* Cranes *laying their Eggs there; and neither their Eggs, nor their Nests, being to be found any where else.* 'Tis plain therefore from them, that the Quarrel is not out of any *Antipathy* the *Pygmies* have to the *Cranes*, but out of love to their own Bellies. But the *Cranes* finding their Nests to be robb'd, and their young Ones prey'd on by these Invaders, no wonder that they should so sharply engage them; and the least they could do, was to fight to the utmost so mortal an Enemy. Hence, no doubt, many a bloody Battle happens, with various success to the Combatants; sometimes with great slaughter of the *long-necked Squadron*; sometimes with great effusion of *Pygmæan* blood. And this may well enough, in a *Poet*'s phancy, be magnified, and represented as a dreadful War; and no doubt of it, were one a *Spectator* of it, 'twould be diverting enough.

——Si videas hoc
Gentibus in nostris, risu quatiere: sed illic,
Quanquam eadem assiduè spectantur Prælia, ridet
Nemo, ubi tota cohors pede non est altior uno (k).

This Account therefore of these Campaigns renewed every year on this Provocation between the *Cranes* and the *Pygmies*, contains nothing but what a cautious Man may believe; and *Homer*'s *Simile* in likening the great shouts of the *Trojans* to the Noise of the *Cranes*, and the Silence of the *Greeks* to that of the *Pygmies*, is very admirable and delightful. For *Aristotle* (l) tells us, That the *Cranes*, to avoid the hardships of the Winter, take a Flight out of *Scythia* to the *Lakes* about the *Nile*, where the *Pygmies* live, and where 'tis very likely the *Cranes* may lay their Eggs and breed, before they return. But these rude *Pygmies* making too bold with them, what could the *Cranes* do less for preserving their Off-spring than fight them; or at least by their mighty Noise, make a shew as if they would. This is but what we may observe in all other Birds. And thus far I think our *Geranomachia* or *Pygmæomachia* looks like a true Story; and there is nothing in *Homer* about it, but what is credible. He only expresses himself, as a *Poet* should do; and if Readers will mistake his meaning, 'tis not his fault.

(i) *Strab. Geograph.* lib. 15. pag. 489. (k) *Juvenal. Satyr.* 13. *vers.* 170. (l) *Aristotle. Hist. Animal.* lib. 8. cap. 15. Edit. Scalig.

'Tis not therefore the *Poet* that is to be blamed, tho' they would father it all on him; but the fabulous *Hiſtorians* in after Ages, who have ſo odly dreſt up this Story by their fantaſtical Inventions, that there is no knowing the truth, till one hath pull'd off thoſe Masks and Viſages, wherewith they have diſguiſed it. For tho' I can believe *Homer*, that there is a fight between the *Cranes* and *Pygmies*, yet I think I am no ways obliged to imagine, that when the *Pygmies* go to theſe Campaigns to fight the *Cranes*, that they ride upon *Partridges*, as *Athenæus* from *Baſilis* an *Indian Hiſtorian* tells us; for, ſaith he (*m*), Βάσιλις δὲ ἐν τῷ δευτέρῳ τῶν Ἰνδικῶν, οἱ μικροί, φησὶν, ἄνδρες οἱ ταῖς Γερανίοις διαπολεμοῦντες Πέρδιξιν ἐφίππιοι χρῶνται. For preſently afterwards he tells us from *Menecles*, that the *Pygmies* not only fight the *Cranes*, but the *Partridges* too, Μενεκλῆς δὲ ἐν πρώτῃ τῆς σωτηρίας οἱ πυγμαῖοι, φησὶ, τοῖς πέρδιξι, καὶ ταῖς Γερανίοις πολέμιοι. This I could more readily agree to, becauſe *Oneſicritus*, as I have quoted him already confirms it; and gives us the ſame reaſon for this, as for fighting the *Cranes*, becauſe they rob their Neſts. But whether theſe *Partridges* are as big as *Geeſe*, I leave as a *Quære*.

Megaſthenes methinks in *Pliny* mounts the *Pygmies* for this Expedition much better, for he ſets them not on a *Pegaſus* or *Partridges*, but on *Rams* and *Goats*: *Fama eſt* (ſaith *Pliny* (*n*)) *inſedentes Arietum Caprarumque dorſis, armatis ſagittis, veris tempore univerſo agmine ad mare deſcendere.* And *Oneſicritus* in *Strabo* tells us, That a *Crane* has been often obſerved to fly from thoſe parts with a braſs Sword fixt in him, πλειστάκις δ' ἐκπίπτειν χαλκοῦν ξίφος ἔχοντα ἀκίδα ἀπὸ τῶν ἐκεῖθεν πληγμάτων (*o*). But whether the *Pygmies* do wear Swords, may be doubted. 'Tis true, *Cteſias* tells us (*p*), That the *King* of *India* every fifth year ſends fifty Thouſand Swords, beſides abundance of other Weapons, to the Nation of the *Cynocephali*, (a ſort of *Monkeys*, as I ſhall ſhew) that live in thoſe Countreys, but higher up in the Mountains: But he makes no mention of any ſuch Preſents to the poor *Pygmies*; tho' he aſſures us, that no leſs than three Thouſand of theſe *Pygmies* are the *King's* conſtant Guards: But withal tells us, that they are excellent *Archers*, and ſo perhaps by diſpatching their Enemies at a diſtance, they may have no need of ſuch Weapons to lye dangling by their ſides. I may therefore be miſtaken in rendering ἀκίδα a Sword; it may be any other ſharp pointed Inſtrument or Weapon, and upon ſecond Thoughts, ſhall ſuppoſe it a ſort of Arrow theſe cunning *Archers* uſe in theſe Engagements.

Theſe, and a hundred ſuch ridiculous *Fables*, have the *Hiſtorians* invented of the *Pygmies*, that I can't but be of *Strabo*'s mind (*q*), Ῥᾴδιον δ' ἄν τις Ἡσιόδῳ, καὶ Ὁμήρῳ πιθέσθαι ἡρωολογοῦσι, καὶ τοῖς τραγικοῖς ποιηταῖς, ἢ Κλησίᾳ τε καὶ Ἡροδότῳ, καὶ Ἑλλανίκῳ, καὶ ἄλλοις τοιούτοις· i. e. *That one may ſooner believe* Heſiod, *and* Homer, *and the* Tragick Poets *ſpeaking of their*

(m) *Athenæi Diepnoſoph.* lib. p. 9. m. 390. (n) *Plinii Nat. Hiſt.* lib. 7. cap. 2. p. 13. (o) *Strabo Geograph.* lib. 15. p. 489. (p) *Vide Photij Biblioth.* (q) *Strabo Geograph.* lib. 11. p. m. 350.

Hero's,

Hero's, *than* Cteſias *and* Herodotus *and* Hellanicus, *and ſuch like.* So ill an Opinion had *Strabo* of the *Indian Hiſtorians* in general, that he cenſures them *all* as fabulous (r); Ἅπαντες μὲν τοίνυν οἱ περὶ τ' Ἰνδικῆς γεγράφασιν ὡς ὅτι τὸ πολὺ ψευδολόγοι γεγόνασι, καθ' ὑπερβολὴν δὲ Δείμαχος· τὰ δ' ἄλλα λέγει Μεγασθένης, Ὀνησικρίτός τε καὶ Νέαρχος, καὶ ἄλλοι πιθανοί· i. e. *All who have wrote of* India, *for the moſt part, are fabulous, but in the higheſt degree* Daimachus; *then* Megaſthenes, Oneſicritus, *and* Nearchus, *and ſuch like.* And as if it had been their greateſt Ambition to excel herein, *Strabo* (s) brings in *Theopompus*, as bragging, Ὅτι καὶ μύθους ἐν ταῖς Ἱστορίαις ἐρεῖ κρείττονας, ἢ ὡς Ἡρόδοτος, καὶ Κτησίας, καὶ Ἑλλάνικος, καὶ οἱ τὰ Ἰνδικὰ συγγεγράφασιν· *That he could foiſt in Fables into Hiſtory, better than* Herodotus *and* Cteſias *and* Hellanicus, *and all that have wrote of* India. The *Satyriſt* therefore had reaſon to ſay,

——*Et quicquid Græcia mendax*
Audet in Hiſtoria (t).

Ariſtotle (u), 'tis true, tells us, Ὅλως μὲν τὰ μὲν ἄγρια ἀγριώτερα ἐν τῇ Ἀσίᾳ, ἀνδρειότερα δὲ πάντα τὰ ἐν τῇ Εὐρώπῃ, πολυμορφότερα δὲ τὰ ἐν τῇ Λιβύῃ· καὶ λέγεταί δέ τις παροιμία, ὅτι ἀεὶ φέρει τι Λιβύη καινόν· i. e. *That generally the Beaſts are wilder in* Aſia, *ſtronger in* Europe, *and of greater variety of ſhapes in* Africa; *for as the* Proverb *ſaith*, Africa *always produces ſomething new. Pliny* (w) indeed aſcribes it to the Heat of the *Climate*, *Animalium, Hominumque effigies monſtriferas, circa extremitates ejus gigni, minimè mirum, artifici ad formanda Corpora, effigieſque cælandas mobilitate igneâ.* But *Nature* never formed a whole *Species* of *Monſters*; and 'tis not the *heat* of the Country, but the warm and fertile Imagination of theſe *Hiſtorians*, that has been more productive of them, than *Africa* it ſelf; as will farther appear by what I ſhall produce out of them, and particularly from the Relation that *Cteſias* makes of the *Pygmies.*

I am the more willing to inſtance in *Cteſias*, becauſe he tells his Story roundly; he no ways minces it; his Invention is ſtrong and fruitful; and that you may not in the leaſt miſtruſt him, he pawns his word, that all that he writes, is certainly true: And ſo ſucceſsful he has been, how Romantick ſoever his Stories may appear, that they have been handed down to us by a great many other Authors, and of Note too; tho' ſome at the ſame time have look'd upon them as meer Fables. So that for the preſent, till I am better informed, and I am not over curious in it, I ſhall make *Cteſias*, and the other *Indian Hiſtorians*, the *Inventors* of the extravagant Relations we at preſent have of the *Pygmies*, and not old *Homer.* He calls them, 'tis true, from ſomething of Reſemblance of their ſhape, ἄνδρας: But theſe *Hiſtorians* make them to ſpeak the *Indian Language*; to uſe the ſame *Laws*; and to be ſo conſiderable a Nation,

(r) *Strabo ibid.* lib. 2. p. m. 48. (s) *Strabo ibid.* lib. 1. p. m. 29. (t) *Juvenal. Satyr.* X. verſ. 174. (u) *Ariſtotle Hiſt. Animal.* lib. 8. cap. 28. (w) *Plin. Nat. Hiſt.* lib. 6. cap. 30. p. m. 741.

and

and ſo valiant, as that the *King* of *India* makes choice of them for his *Corps de Guards*; which utterly ſpoils *Homer*'s *Simile*, in making them ſo little, as only to fight *Cranes*.

Cteſias's Account therefore of the *Pygmies* (as I find it in *Photius*'s *Bibliotheca* (x), and at the latter end of ſome Editions of *Herodotus*) is this:

Ὅτι ἐν μέσῃ τῇ Ἰνδικῇ ἄνθρωποι εἰσι μέλανες, καὶ καλοῦνται πυγμαῖοι, τοῖς ἄλλοις ὁμόγλωσσοι Ἰνδοῖς· μικροὶ δέ εἰσι λίαν· οἱ μακρόταλοι αὐτῶν πηχέων δύο, οἱ δὲ πλεῖστοι, ἐνὸς ἡμίσεως πήχεως, κόμην δὲ ἔχουσι μακροτάτην, μέχρι καὶ ὀπίσω τὰ γόνατα, καὶ ἔτι καλλίονα, καὶ πώγωνα μέγιστον πάντων ἀνθρώπων· ἐπειδὰν δὲ τὸν πώγωνα μέγα φύσωσιν, ἐκέτι ἀμφιννυνται ἀλλὰ ἱμάτιον· ἀλλὰ τὰς τρίχας, τὰς μὲν ἐκ τῆς κεφαλῆς, ὅπισθεν καθιεῖσαι πολὺ κάτω τῶν γονάτων· τὰς δὲ ἐκ τοῦ πώγωνος, ἔμπροσθεν μέχρι ποδῶν ἑλκομένας. Ἔπειτα περιπυκασάμενοι τὰς τρίχας περὶ ἅπαν τὸ σῶμα, ζώννυνται, χρώμενοι αὐταῖς ἀντὶ ἱματίου. αἰδοῖον δὲ μέγα ἔχουσιν, ὥστε φαίνειν τῶν σφυρῶν αὐτῶν, καὶ παχύ. αὐτοῦ δὲ σμικροί τε καὶ ἀσχροί. τὰ δὲ πρόσθια αὐτῶν, ὡς ἄρνες. καὶ αἱ βόες καὶ οἱ ὄνοι, σχεδὸν ὅσον κριοί. καὶ οἱ ἵπποι αὐτῶν καὶ οἱ ἡμίονοι, καὶ τὰ ἄλλα πάντα ζῶα, ὀλίγῳ μείζω κριῶν. ἔπονται δὲ τῷ βασιλεῖ τῷ Ἰνδῶν, τόταν τῶν πυγμαίων ἄνδρες τοξίλιοι. σφόδρα γὰρ εἰσι τοξόται· δικαιότατοι δέ εἰσι καὶ νόμοισι χρῶνται ὥσπερ καὶ οἱ Ἰνδοί. Λαγωόν τε καὶ ἀλώπεκας θηρεύουσιν, οὐ τοῖς κυσὶν, ἀλλὰ κόραξι καὶ ἱκτῖσι καὶ κορώναις καὶ αἰετοῖς.

Narrat præter iſta, in media India homines reperiri nigros, qui Pygmæi appellentur. Eadem hos, qua Inda reliqui, lingua uti, ſed valde eſſe parvos, ut maximi duorum cubitorum, & plerique unius duntaxat cubiti cum dimidio altitudinem non excedant. Comam alere longiſſimam, ad ipſa uſque genua demiſſam, atque etiam infra, cum barba longiore, quàm apud ullos hominum. Quæ quidem ubi illis promiſſior eſſe cœperit, nulla deinceps veſte uti: ſed capillos multò infra genua à tergo demiſſos, barbámque præter pectus ad pedes uſque defluentem, per totum corpus in orbem conſtipare & cingere, atque ita pilos ipſis ſuos veſtimenti loco eſſe. Veretrum illis eſſe craſſum ac longum, quod ad ipſos quoque pedum malleolos pertingat. Pygmeos hoſce ſimis eſſe naribus, & deformes. Ipſorum item oves agnorum noſtrorum inſtar eſſe; boves & aſinos, arietum ferè magnitudine, equos item multóſque & cætera jumenta omnia nihilo eſſe noſtris arietibus majora. Tria horum Pygmæorum millia Indorum regem in ſuo comitatu habere, quòd ſagittarij ſint peritiſſimi. Summos eſſe juſtitiæ cultores, iiſdémque quibus Indi reliqui, legibus parere. Venari quoque lepores vulpéſque, non canibus, ſed corvis, milvis, cornicibus, aquilis adhibitis.

'In the middle of *India* (ſaith *Cteſias*) there are black Men, they are 'call'd *Pygmies*, uſing the ſame Language, as the other *Indians*; they

(x) *Photij Bibliothec. Cod.* 72. p. m. 145.

are

'are very little, the talleſt of them being but two Cubits, and moſt of 'them but a Cubit and a half high. They have very long hair, reaching 'down to their Knees and lower; and a Beard larger than any Man's. 'After their Beards are grown long, they wear no Cloaths, but the Hair 'of their Head falls behind a great deal below their Hams; and that of 'their Beards before comes down to their Feet: then laying their Hair 'thick all about their Body, they afterwards gird themſelves, making 'uſe of their Hair for Cloaths. They have a *Penis* ſo long, that it rea-'ches to the Ancle, and the thickneſs is proportionable. They are flat 'noſed, and ill favoured. Their Sheep are like Lambs; and their Oxen 'and Aſſes ſcarce as big as Rams; and their Horſes and Mules, and all 'their other Cattle not bigger. Three thouſand Men of theſe *Pygmies* 'do attend the *King* of *India*. They are good *Archers*; they are very 'juſt, and uſe the ſame *Laws* as the *Indians* do. They kill Hares and 'Foxes, not with Dogs, but with Ravens, Kites, Crows, and Eagles.

Well, if they are ſo good Sports-men, as to kill Hares and Foxes with Ravens, Kites, Crows and Eagles, I can't ſee how I can bring off *Homer*, for making them fight the *Cranes* themſelves. Why did they not fly their *Eagles* againſt them? theſe would make greater Slaughter and Execution, without hazarding themſelves. The only Excuſe I have is, that *Homer's Pygmies* were real *Apes* like *Men*; but thoſe of *Cteſias* were neither *Men* nor *Pygmies*; only a Creature begot in his own Brain, and to be found no where elſe.

Cteſias was Phyſician to *Artaxerxes Mnemon* as *Diodorus Siculus* (*y*) and *Strabo* (*z*) inform us. He was contemporary with *Xenophon*, a little later than *Herodotus*; and *Helvicus* in his *Chronology* places him three hundred eighty three years before *Chriſt*: He is an ancient Author, 'tis true, and it may be upon that ſcore valued by ſome. We are beholden to him, not only for his Improvements on the Story of the *Pygmies*, but for his Remarks likewiſe on ſeveral other parts of *Natural Hiſtory*; which for the moſt part are all of the ſame ſtamp, very wonderful and incredible; as his *Mantichora*, his *Gryphins*, the *horrible Indian Worm*, a Fountain of *Liquid Gold*, a Fountain of *Honey*, a Fountain whoſe Water will make a Man confeſs all that ever he did, a Root he calls πάρδον, that will attract Lambs and Birds, as the Loadſtone does filings of Steel; and a great many other Wonders he tells us: all which are copied from him by *Ælian*, *Pliny*, *Solinus*, *Mela*, *Philoſtratus* and others. And *Photius* concludes *Cteſias's* Account of *India* with this paſſage; Ταῦτα γράφων καὶ μυθολογῶν Κτησίας. λέγει τ' ἀληθίζαλα γράφων· ἐπαίων ὧς τὰ μὲν αὐτὸς ἰδὼν γράφει, τὰ δ' παρ' αὐτῷ μαθὼν τῷ εἰδότων. πολλὰ δ' τέτων καὶ ἄλλα θαυμασιώτερα παραλιπεῖν, διὰ τὸ μὴ δόξαι τοῖς μὴ ταῦτα θεασαμένοις ἄπιστα συγγράφειν· i. e. *Theſe things* (ſaith he) Cteſias *writes and feigns, but he*

(*y*) *Diodor. Siculi Bibliothec.* lib. 2. p. m. 118. (*z*) *Strabo Geograph.* lib. 14. p. 451.

him-

himself says all he has wrote is very true. Adding, that some things which he describes, he had seen himself; and the others, he had learn'd from those that had seen them: That he had omitted a great many other things more wonderful, because he would not seem to those that have not seen them, to write incredibilities. But notwithstanding all this, *Lucian* (*a*) will not believe a word he saith; for he tells us that *Ctesias* has wrote of *India*, Ἃ μήτε αὐτὸς εἶδε, μήτε ἄλλου εἰπόντος ἤκουσεν, *What he neither saw himself, nor ever heard from any Body else.* And *Aristotle* tells us plainly, he is not fit to be believed: Ἐν δὲ τῇ Ἰνδικῇ ὥς φησι Κτησίας, οὐκ ὢν ἀξιόπιστος (*b*). And the same Opinion *A. Gellius* (*c*) seems to have of him, as he had likewise of several other old *Greek Historians* which happened to fall into his hands at *Brundusium*, in his return from *Greece* into *Italy*; he gives this Character of them and their performance: *Erant autem isti omnes libri Græci, miraculorum fabularumque pleni: res inauditæ, incredulæ, Scriptores veteres non parvæ authoritatis*, Aristeas Proconnesius, & Isagonus, & Nicæensis, & Ctesias, & Onesicritus, & Polystephanus, & Hegesias. Not that I think all that *Ctesias* has wrote is fabulous; For tho' I cannot believe his *speaking Pygmies*, yet what he writes of the *Bird* he calls Βίττακος, that it would speak *Greek* and the *Indian Language*, no doubt is very true; and as *H. Stephens* (*d*) observes in his Apology for *Ctesias*, such a Relation would seem very surprising to one, that had never seen nor heard of a *Parrot*.

But this Story of *Ctesias*'s *speaking Pygmies*, seems to be confirm'd by the Account that *Nonnosus*, the Emperour *Justinian*'s Ambassador into *Æthiopia*, gives of his Travels. I will transcribe the Passage, as I find it in *Photius* (*e*), and 'tis as follows:

Ὅτι ἀπὸ τῆς φαρσὰν πλέοντι τῷ Νοννόσῳ, ἐπὶ τὴν ἐσχάτην τῶν νήσων κατηντηκότι τοίον δέ τι συνέβη, θαῦμα καὶ ἀκοῦσαι. ἐνέτυκε γάρ τισι μορφὴν μὲν καὶ ἰδέαν ἔχουσιν ἀνθρωπίνην, βραχυτάτοις δὲ τὸ μέγεθος, καὶ μέλασι τὴν χρόαν. ὑπὸ δὲ τριχῶν δεδασυσμένοις διὰ παντὸς τοῦ σώματος. εἵποντο δὲ τοῖς αἰδράσι καὶ γυναῖκες παραπλήσιαι καὶ παιδάρια ἔτι βραχύτερα, τῶν παρ' αὐτοῖς ἀνδρῶν. γυμνοὶ δὲ ἦσαν ἅπαντες· πλὴν δέρματι τινὶ μικρῷ τὴν αἰδῶ περιεκάλυπτον, οἱ προβεβηκότες ὁμοίως ἄνδρες τε καὶ γυναῖκες. ἄγριον δὲ οὐδὲν ἐπεδείκνυντο οὐδὲ ἀνήμερον· ἀλλὰ καὶ φωνὴν εἶχον μὲν ἀνθρωπίνην, ἄγνωστον δὲ παντάπασι τὴν

Naviganti à Pharsa Nonnoso, & ad extremam usque insularum delato, tale quid occurrit, vel ipso auditu admirandum. Incidit enim in quosdam forma quidem & figura humana, sed brevissimos, & cutem nigros, totúmque pilosos corpus. Sequebantur viros æquales fœminæ, & pueri adhuc breviores. Nudi omnes agunt, pelle tantum brevi adultiores verenda tecti, viri pariter ac fœminæ: agreste nihil, neque efferum quid præ se ferentes. Quin & vox illis humana, sed omnibus, etiam accolis, prorsus ignota lingua, multoque amplius Nonnosi sociis. Vivunt marinis ostreis, & piscibus è

(a) *Lucian* lib. 1. *veræ Histor.* p. m. 373. (b) *Arist. Hist. Animal.* lib. 8. cap. 28. (c) *A. Gellij Noctes Attic.* lib. 9. cap. 4. (d) *Henr. Stephani de Ctesia Historico antiquissimo disquisitio, ad finem Herodoti.* (e) *Photij Bibliothec.* cod. 3. p. m. 7.

διάλεκτον

διάλεκτον τοῖς τὲ περιοίκοις ἅπασι, καὶ πολλῷ πλέον τοῖς περὶ τὸν Νοννοσον, διέζων δὲ ἐκ θαλαττίων ὀστρείων, καὶ ἰχθύων, τῶν ἀπὸ τῆς θαλάσσης εἰς τὸν νῆσον ἀποῤῥιπτομένων· θάρσος δὲ εἶχον οὐδὲν. ἀλλὰ καὶ ὁρῶντες τοὺς καθ' ἡμᾶς ἀνθρώπους ὑπέπτησαν, ὥσπερ ἡμεῖς τὰ μείσω τῶν θηρίων.

è mari ad insulam projectis. Audaces minimè sunt, ut nostris conspectis hominibus, quemadmodum nos visa ingenti fera, metu perculsi fuerint.

'That *Nonnosus* sailing from *Pharsa*, when he came to the farthermost 'of the Islands, a thing, very strange to be heard of, happened to him; 'for he lighted on some (*Animals*) in shape and appearance like *Men*, 'but little of stature, and of a black colour, and thick covered with 'hair all over their Bodies. The Women, who were of the same sta-'ture, followed the Men: They were all naked, only the Elder of them, 'both Men and Women, covered their Privy Parts with a small Skin. 'They seemed not at all fierce or wild; they had a Humane Voice, but 'their *Dialect* was altogether unknown to every Body that lived about 'them; much more to those that were with *Nonnosus*. They liv'd upon 'Sea Oysters, and Fish that were cast out of the Sea, upon the Island. 'They had no Courage; for seeing our Men, they were frighted, as we 'are at the sight of the greatest wild Beast.

Φωνὴν εἶχον μὲν ἀνθρωπίνην I render here, *they had a Humane Voice*, not *Speech*: for had they spoke any Language, tho' their *Dialect* might be somewhat different, yet no doubt but some of the Neighbourhood would have understood something of it, and not have been such utter Strangers to it. Now 'twas observed of the *Orang-Outang*, that it's *Voice* was like the *Humane*, and it would make a Noise like a Child, but never was observed to speak, tho' it had the *Organs* of *Speech* exactly formed as they are in *Man*; and no Account that ever has been given of this Animal do's pretend that ever it did. I should rather agree to what *Pliny* (*f*) mentions, *Quibusdam pro Sermone nutus motusque Membrorum est*; and that they had no more a Speech, than *Ctesias* his *Cynocephali* which could only bark, as the same *Pliny* (*g*) remarks; where he saith, *In multis autem Montibus Genus Hominum Capitibus Caninis, ferarum pellibus velari, pro voce latratum edere, unguibus armatum venatu & Aucupio vesci, horum supra Centum viginti Millia fuisse prodente se Ctesias scribit.* But in *Photius* I find, that *Ctesias's Cynocephali* did speak the *Indian Language* as well as the *Pygmies*. Those therefore in *Nonnosus* since they did not speak the *Indian*, I doubt, spoke no *Language* at all; or at least, no more than other *Brutes* do.

Ctesias I find is the only Author that ever understood what Language 'twas that the *Pygmies* spake: For *Herodotus* (*h*) owns that they use a sort of Tongue like to no other, but screech like *Bats*. He saith, Οἱ Γαράμαντες οὗτοι τοὺς τρωγλοδύτας Αἰθίοπας θηρεύουσι τοῖσι τετρίπποισι. Οἱ γὰρ

(f) *Plinij Nat. Hist.* lib. 6. cap. 30. p. m. 741. (g) *Plinij Nat. Hist.* lib. 7. cap. 2. p. m. 11.
(h) *Herodot. in Melpomene.* pag. 283.

Τρωγλοδύται αἰθίοπες πόδας τάχιστοι ἀνθρώπων πάντων εἰσὶ, τῶν ἡμεῖς πέρι λόγους ἀποφερομένους ἀκούομεν. Σιτέονται δὲ οἱ Τρωγλοδύται ὄφις, καὶ Σαύρους, καὶ τὰ τοιαῦτα τῶν Ἑρπετῶν. Γλῶσσαν δὲ οὐδεμιῇ ἄλλῃ παρομοίην νενομίκασι, ἀλλὰ τετρύγασι καθάπερ αἱ νυκτερίδες· i. e. *These* Garamantes *hunt the* Troglodyte Æthiopians *in Chariots with four Horses. The* Troglodyte Æthiopians *are the swiftest of foot of all Men that ever he heard of by any Report. The* Troglodytes *eat Serpents and Lizards, and such sort of Reptiles. They use a Language like to no other Tongue, but screech like Bats.*

Now that the *Pygmies* are *Troglodytes*, or do live in Caves, is plain from *Aristotle* (*i*), who saith, Τρωγλοδύται δ' εἰσὶ τὸν βίον. And so *Philostratus* (*k*), Τοὺς δὲ πυγμαίους οἰκεῖν μὲν ὑπογείους. And methinks *Le Compte*'s Relation concerning the *wild* or *savage Man* in *Borneo*, agrees so well with this, that I shall transcribe it: for he tells us, (*l*) *That in* Borneo *this* wild *or* savage Man *is indued with extraordinary strength; and notwithstanding he walks but upon two Legs, yet he is so swift of foot, that they have much ado to outrun him. People of Quality course him, as we do Stags here: and this sort of hunting is the King's usual divertisement.* And *Gassendus* in the Life of *Peiresky*, tells us they commonly hunt them too in *Angola* in *Africa*, as I have already mentioned. So that very likely *Herodotus*'s *Troglodyte Æthiopians* may be no other than our *Orang-Outang* or *wild Man*. And the rather, because I fancy their Language is much the same: for an *Ape* will chatter, and make a noise like a *Bat*, as his *Troglodytes* did: And they undergo to this day the same Fate of being hunted, as formerly the *Troglodytes* used to be by the *Garamantes*.

Whether those ἄνδρας μικροὺς μετρίων ἐλάσσονας ἀνδρῶν which the *Nasamones* met with (as *Herodotus* (*m*) relates) in their Travels to discover *Libya*, were the *Pygmies*; I will not determine: It seems the *Nasamones* neither understood their Language, nor they that of the *Nasamones*. However, they were so kind to the *Nasamones* as to be their Guides along the Lakes, and afterwards brought them to a City, ἐν τῇ πάντας εἶναι τοῖσι ἄγουσι τὸ μέγεθος ἴσους, χρῶμα δὲ μέλανας, i. e. *in which all were of the same stature with the Guides, and black.* Now since they were all *little black Men*, and their Language could not be understood, I do suspect they may be a Colony of the *Pygmies*: And that they were no farther Guides to the *Nasamones*, than that being frighted at the sight of them, they ran home, and the *Nasamones* followed them.

I do not find therefore any good Authority, unless you will reckon *Ctesias* as such, that the *Pygmies* ever used a Language or Speech, any

(i) *Arist. Hist. Animal.* lib. 8. cap. 15. p. m. 913. (k) *Philostrat. in vita Apollon. Tyanai*, lib. 3. cap. 14. p. m. 152. (*l*) *Lewis le Compte* Memoirs and Observations on *China*, p. m. 510. (*m*) *Herodotus in Euterpe* seu lib. 2. p. m. 102.

more

more than other *Brutes* of the ſame *Species* do among themſelves, and what we know nothing of, whatever *Democritus* and *Melampodes* in *Pliny* (*n*), or *Apollonius Tyanæus* in *Porphyry* (*o*) might formerly have done. Had the *Pygmies* ever ſpoke any *Language* intelligible by Mankind, this might have furniſhed our *Hiſtorians* with notable Subjects for their *Novels*; and no doubt but we ſhould have had plenty of them.

But *Albertus Magnus*, who was ſo lucky as to gueſs that the *Pygmies* were a ſort of *Apes*; that he ſhould afterwards make theſe *Apes* to *ſpeak*, was very unfortunate, and ſpoiled all; and he do's it, methinks, ſo very awkardly, that it is as difficult almoſt to underſtand his Language as his *Apes*; if the Reader has a mind to attempt it, he will find it in the Margin (*p*).

Had *Albertus* only aſſerted, that the *Pygmies* were a ſort of *Apes*, his Opinion poſſibly might have obtained with leſs difficulty, unleſs he could have produced ſome Body that had heard them talk. But *Ulyſſes Aldrovandus* (*q*) is ſo far from believing his *Ape Pygmies* ever ſpoke, that he utterly denys, that there were ever any ſuch Creatures in being, as the *Pygmies*, at all; or that they ever fought the *Cranes*. *Cum itaque Pygmæos* (ſaith he) *dari negemus, Grues etiam cum iis Bellum gerere, ut fabulantur, negabimus, & tam pertinaciter id negabimus, ut ne jurantibus credemus.*

I find a great many very Learned Men are of this Opinion: And in the firſt place, *Strabo* (*r*) is very poſitive; Ἑωρακὼς μὲν γὰρ οὐδεὶς ἐξηγεῖται πρὸ πίστεως ἀξίων ἀνδρῶν· i. e. *No Man worthy of belief did ever ſee them.* And upon all occaſions he declares the ſame. So *Julius Cæſar Scaliger* (*s*) makes them to be only a Fiction of the Ancients, *At hæc omnia* (ſaith he) *Antiquorum figmenta & meræ Nugæ, ſi exſtarent, reperirentur. At cum univerſus Orbis nunc nobis cognitus ſit, nullibi hæc Naturæ Excrementa reperiri certiſſimum eſt.* And *Iſaac Caſaubon* (*t*) ridicules ſuch as pretend to juſtifie them: *Sic noſtra ætate* (ſaith he) *non deſunt, qui eandem de Pygmæis lepidam fabellam renovent; ut qui etiam è Sacris Literis, ſi Deo placet, fidem illis conentur aſtruere. Legi etiam Bergei cujuſdam Galli Scripta, qui ſe vidiſſe diceret. At non ego credulus illi, illi inquam Omnium Bipedum mendaciſſimo.* I ſhall add one Authority more, and that is of

(n) *Plinij Nat. Hiſt.* lib. 10. cap. 49. (o) *Porphyrius de Abſtinentia*, lib. 3. pag. m. 107.

(p) *Si qui Homines ſunt Silveſtres, ſicut Pygmeus, non ſecundum unam rationem nobiſcum dicti ſunt Homines, ſed aliquod habent Hominis in quadam deliberatione & Loquela*, &c. A little after adds, *Voces quædam (ſc. Animalia) formant ad diverſos conceptus quos habent, ſicut Homo & Pygmæus; & quædam non faciunt hoc, ſicut multitudo fere tota aliorum Animalium. Adhuc autem eorum quæ ex ratione cogitativa formant voces, quædam ſunt ſuccumbentia, quædam autem non ſuccumbentia. Dico autem ſuccumbentia, à conceptu Animæ cadentia & mota ad Naturæ Inſtinctum, ſicut Pygmeus, qui non, ſequitur rationem Loquelæ ſed Naturæ Inſtinctum; Homo autem non ſuccumbit ſed ſequitur rationem.* Albert. Magn. de Animal. lib. 1. cap. 3. p. m. 3.

(q) *Ulyſ. Aldrovandi Ornitholog.* lib. 20. p. m. 344. (r) *Strabo Geograph.* lib. 17. p. m. 565.

(s) *Jul. Cæſ. Scaliger. Comment. in Ariſt. Hiſt. Animal.* lib. 8. §. 126. p. m. 914. (t) *Iſaac Caubon Notæ & Caſtigat. in* lib. 1. *Strabonis Geograph.* p. m. 38.

Adrian Spigelius, who produces a Witness that had examined the very place, where the *Pygmies* were said to be; yet upon a diligent enquiry, he could neither find them, nor hear any tidings of them. *Spigelius* (*u*) therefore tells us, *Hoc loco de Pygmæis dicendum erat, qui παρὰ πύγωνα dicti à statura, quæ ulnam non excedunt. Verùm ego Poetarum fabulas esse crediderim, pro quibus tamen* Aristoteles *minimè haberi vult, sed veram esse Historiam.* 8. Hist. Animal. 12. *asseverat. Ego quo minùs hoc statuam, tum Authoritate primùm Doctissimi* Strabonis 1. Geograph. *coactus sum, tum potissimùm nunc moveor, quod nostro tempore, quo nulla Mundi pars est, quam Nautarum Industria non perlustrarit, nihil tamen unquam simile aut visum est, aut auditum. Accedit quod* Franciscus Alvarez *Lusitanus, qui ea ipsa loca peragravit, circa quæ* Aristoteles *Pygmæos esse scribit, nullibi tamen tam parvam Gentem à se conspectam tradidit, sed Populum esse Mediocris staturæ, &* Æthiopes *tradit.*

I think my self therefore here obliged to make out, that there were such Creatures as *Pygmies*, before I determine what they were, since the very being of them is called in question, and utterly denied by so great Men, and by others too that might be here produced. Now in the doing this, *Aristotle*'s Assertion of them is so very positive, that I think there needs not a greater or better Proof; and it is so remarkable a one, that I find the very Enemies to this Opinion at a loss, how to shift it off. To lessen it's Authority they have interpolated the *Text*, by foisting into the *Translation* what is not in the Original; or by not translating at all the most material passage, that makes against them; or by miserably glossing it, to make him speak what he never intended: Such unfair dealings plainly argue, that at any rate they are willing to get rid of a Proof, that otherwise they can neither deny, or answer.

Aristotle's Text is this, which I shall give with *Theodorus Gaza*'s Translation: for discoursing of the Migration of Birds, according to the Season of the Year, from one Country to another, he saith (*w*):

Μετὰ μὲν τὴν φθινοπωρινὴν Ἰσημερίαν, ἐκ τοῦ Πόντου καὶ τῶν ψυχρῶν φεύγοντα τὸν ἐπιόντα χειμῶνα· μετὰ δὲ τὴν ἐαρινὴν, ἐκ τῶν θερινῶν, εἰς τοὺς τόπους τοὺς ψυχροὺς, φοβούμενα τὰ καύματα· τὰ μὲν, καὶ ἐκ τῶν ἐγγὺς τόπων ποιούμενα τὰς μεταβολὰς, τὰ δὲ, καὶ ἐκ τῶν ἐσχάτων, ὡς εἰπεῖν, οἷς αἱ γέρανοι ποιοῦσι. Μεταβάλλουσι γὰρ ἐκ τῶν Σκυθικῶν εἰς τὰ ἕλη τὰ ἄνω τῆς Αἰγύπτου, ὅθεν ὁ Νεῖλος ῥεῖ. Ἔστι δὲ ὁ τόπος οὗτος περὶ ὃν οἱ πυγμαῖ-

Jam ab Autumnali Æquinoctio ex Ponto, Locisque frigidis fugiunt Hyemem futuram. A Verno autem ex tepida Regione ad frigidam sese conferunt, æstûs metu futuri: & alia de locis vicinis discedunt, alia de ultimis, prope dixerim, ut Grues faciunt, quæ ex Scythicis Campis ad Paludes Ægypto superiores, unde Nilus profluit, veniunt, quo in loco pugnare cum Pygmæis dicuntur. Non enim id

(*u*) *Adrian. Spigelij de Corporis Humani fabrica*, lib. 1. cap. 7. p. m. 15. (*w*) *Aristotel. Hist. Animal.* lib. 8. cap. 12.

οι κατοικοῦσιν· οὐ γάρ ἐστι τοῦτο μῦθος, ἀλλ' ἔστι κατὰ τὴν ἀλήθειαν. Γένος μικρὸν μὲν, ὥσπερ λέγεται, καὶ αὐτοὶ καὶ οἱ ἵπποι· Τρωγλοδύται δ' εἰσὶ τὸν βίον.

fabula est, sed certè, genus tum hominum, tum etiam Equorum pusillum (ut dicitur) est, deguntque in Cavernis, unde Nomen Troglodytæ à subeundis Cavernis accepere.

In English 'tis thus: 'At the *Autumnal Æquinox* they go out of *Pontus* 'and the cold Countreys to avoid the Winter that is coming on. At the '*Vernal Æquinox* they pass from hot Countreys into cold ones, for fear of 'the ensuing Heat; some making their Migrations from nearer places; 'others from the most remote (as I may say) as the *Cranes* do: for they 'come out of *Scythia* to the Lakes above *Ægypt*, whence the *Nile* do's flow. 'This is the place, whereabout the *Pygmies* dwell: For this is no *Fable*, 'but a *Truth*. Both they and the Horses, as 'tis said, are a small kind. 'They are *Troglodytes*, or live in Caves.

We may here observe how positive the *Philosopher* is, that there are *Pygmies*; he tells us where they dwell, and that 'tis no Fable, but a Truth. But *Theodorus Gaza* has been unjust in translating him, by foisting in, *Quo in loco pugnare cum Pygmæis dicuntur*, whereas there is nothing in the Text that warrants it: As likewise, where he expresses the little Stature of the *Pygmies* and the Horses, there *Gaza* has rendered it, *Sed certè Genus tum Hominum, tum etiam Equorum pusillum*. *Aristotle* only saith, Γένος μικρὸν μὲν, ὥσπερ λέγεται, καὶ αὐτοὶ, καὶ οἱ ἵπποι. He neither makes his *Pygmies Men*, nor saith any thing of their fighting the *Cranes*; tho' here he had a fair occasion, discoursing of the Migration of the *Cranes* out of *Scythia* to the *Lakes* above *Ægypt*, where he tells us the *Pygmies* are. *Cardan* (x) therefore must certainly be out in his guess, that *Aristotle* only asserted the *Pygmies* out of Complement to his Friend *Homer*; for surely then he would not have forgot their fight with the *Cranes*; upon which occasion only *Homer* mentions them (*). I should rather think that *Aristotle*, being sensible of the many Fables that had been raised on this occasion, studiously avoided the mentioning this fight, that he might not give countenance to the Extravagant Relations that had been made of it.

But I wonder that neither *Casaubon* nor *Duvall* in their Editions of *Aristotle*'s Works, should have taken notice of these Mistakes of *Gaza*, and corrected them. And *Gesner*, and *Aldrovandus*, and several other Learned Men, in quoting this place of *Aristotle*, do make use of this faulty Translation, which must necessarily lead them into Mistakes. *Sam. Bochartus* (y) tho' he gives *Aristotle*'s Text in Greek, and adds a new

(x) *Cardan de Rerum varietate*, lib. 8. cap. 40. p. m. 153. (*) *Apparet ergo* (saith *Cardan*) *Pygmæorum Historiam esse fabulosam, quod & Strabo sentit, & nostra ætas, cum omnia nunc fermè orbis mirabilia innotuerint, declarat. Sed quod tantum Philosophum decepit, fuit Homeri Auctoritas non apud illum levis.* (y) *Bocharti Hierozoic. S. de Animalib. S. Script. part. Posterior.* lib. 1. cap. 11. p. m. 76.

Translation

Tranſlation of it, he leaves out indeed the *Cranes* fighting with the *Pygmies*, yet makes them *Men*, which *Ariſtotle* do's not; and by anti-placing, *ut aiunt*, he renders *Ariſtotle*'s Aſſertion more dubious; *Neque enim* (ſaith he in the Tranſlation) *id eſt fabula, ſed reverâ, ut aiunt, Genus ibi parvum eſt tam Hominum quàm Equorum.* *Julius Cæſar Scaliger* in tranſlating this Text of *Ariſtotle*, omits both theſe Interpretations of *Gaza*; but on the other hand, is no leſs to be blamed in not tranſlating at all the moſt remarkable paſſage, and where the *Philoſopher* ſeems to be ſo much in earneſt; as, ὃ γὰρ ἔστι τοῦτο μῦθος, ἀλλ' ἔστι καλὰ τ'ὼ ἀληθείαν, this he leaves wholly out, without giving us his reaſon for it, if he had any: And *Scaliger*'s (*z*) inſinuation in his Comment, *viz. Negat eſſe fabulam de his (ſc. Pygmeis)* Herodotus, *at Philoſophus ſemper moderatus & prudens etiam addidit,* ὥσπερ λέγεται, is not to be allowed. Nor can I aſſent to Sir *Thomas Brown*'s (*a*) remark upon this place; *Where indeed* (ſaith he) Ariſtotle *plays the* Ariſtotle; *that is, the wary and evading Aſſertor; for tho' with* non eſt fabula *he ſeems at firſt to confirm it, yet at laſt he claps in,* ſicut aiunt, *and ſhakes the belief he placed before upon it. And therefore* Scaliger (ſaith he) *hath not tranſlated the firſt, perhaps ſuppoſing it ſurreptitious, or unworthy ſo great an Aſſertor.* But had *Scaliger* known it to be ſurreptitious, no doubt but he would have remarked it; and then there had been ſome Colour for the Gloſs. But 'tis unworthy to be believed of *Ariſtotle*, who was ſo wary and cautious, that he ſhould in ſo ſhort a paſſage, contradict himſelf; and after he had ſo poſitively affirmed the Truth of it, preſently doubt it. His ὥσπερ λέγεται therefore muſt have a Reference to what follows, *Puſillum genus, ut aiunt, ipſi atque etiam Equi*, as *Scaliger* himſelf tranſlates it.

I do not here find *Ariſtotle* aſſerting or confirming any thing of the fabulous Narrations that had been made about the *Pygmies*. He does not ſay that they were ἄνδρες, or ἀνθρωποι μικροὶ, or μέλανες; he only calls them πυγμαῖοι. And diſcourſing of the *Pygmies* in a place, where he is only treating about *Brutes*, 'tis reaſonable to think, that he looked upon them only as ſuch. *This is the place where the* Pygmies *are; this is no fable*, ſaith *Ariſtotle*, as 'tis that they are a Dwarfiſh Race of Men; that they ſpeak the *Indian* Language; that they are excellent Archers; that they are very Juſt; and abundance of other Things that are fabulouſly reported of them; and becauſe he thought them *Fables*, he does not take the leaſt notice of them, but only ſaith, *This is no Fable, but a Truth, that about the Lakes of* Nile ſuch *Animals*, as are called *Pygmies*, do live. And, as if he had foreſeen, that the abundance of Fables that *Cteſias* (whom he ſaith is not to be believed) and the *Indian Hiſtorians* had invented about them, would make the whole Story to appear as a Figment, and render it doubtful, whether there were ever ſuch Creatures as *Pyg-*

(z) *Scaliger. Comment. in Ariſt. Hiſt. Animal.* lib. 8. p. m. 914.

(b) Sir *Thomas Brown*'s *Pſeudodoxia*, or, *Enquiries into Vulgar Errors*, lib. 4. cap. 11.

mies

mies in Nature; he more zealously asserts the *Being* of them, and assures us, That *this is no Fable, but a Truth.*

I shall therefore now enquire what sort of Creatures these *Pygmies* were; and hope, so to manage the Matter, as in a great measure, to abate the Passion these Great Men have had against them: for, no doubt, what has incensed them the most, was, the fabulous *Historians* making them a part of *Mankind*, and then inventing a hundred ridiculous Stories about them, which they would impose upon the World as real Truths. If therefore they have Satisfaction given them in these two Points, I do not see, but that the Business may be accommodated very fairly; and that they may be allowed to be *Pygmies*, tho' we do not make them *Men*.

For I am not of *Gesner*'s mind, *Sed veterum nullus* (saith he (*b*)) *aliter de Pygmæis scripsit, quàm Homunciones esse.* Had they been a Race of *Men*, no doubt but *Aristotle* would have informed himself farther about them. Such a Curiosity could not but have excited his Inquisitive *Genius*, to a stricter Enquiry and Examination; and we might easily have expected from him a larger Account of them. But finding them, it may be, a sort of *Apes*, he only tells us, that in such a place these *Pygmies* live.

Herodotus (*c*) plainly makes them *Brutes*: For reckoning up the *Animals* of *Libya*, he tells us, Καὶ γὰρ οἱ ὄφιες οἱ ὑπερμεγάθεες, καὶ οἱ λέοντες κατὰ τούτους εἰσὶ, καὶ οἱ ἐλέφαντές τε καὶ ἄρκτοι, καὶ ἀσπίδες τε καὶ ὄνοι οἱ τὰ κέρατα ἔχοντες· καὶ οἱ κυνοκέφαλοι (in the Margin 'tis ἀκέφαλοι) οἱ ἐν τοῖσι στήθεσι τοὺς ὀφθαλμοὺς ἔχοντες (ὡς δὴ λέγεται γὲ ὑπὸ λιβύων) καὶ ἄγριοι ἄνδρες, καὶ γυναῖκες ἄγριαι καὶ ἄλλα πλῆθεϊ πολλὰ θηρία ἀκατάψευστα· i.e. *That there are here prodigious large Serpents, and Lions, and Elephants, and Bears, and Asps, and Asses that have horns, and Cynocephali,* (in the Margin 'tis *Acephali*) *that have Eyes in their Breast, (as is reported by the Libyans) and wild Men, and wild Women, and a great many other wild Beasts that are not fabulous.* 'Tis evident therefore that *Herodotus* his ἄγριοι ἄνδρες, καὶ γυναῖκες ἄγριαι are only θηρία or wild Beasts; and tho' they are call'd ἄνδρες, they are no more *Men* than our *Orang-Outang*, or *Homo Sylvestris*, or *wild Man*, which has exactly the same Name, and I must confess I can't but think is the same Animal: and that the same Name has been continued down to us, from his Time, and it may be from *Homer*'s.

So *Philostratus* speaking of *Æthiopia* and *Ægypt*, tells us (*d*), Βόσκουσι δὲ καὶ θηρία οἷα οὐχ ἑτέρωθι· καὶ ἀνθρώπους μέλανας, ὁ μὴ ἄλλαι ἤπειροι. Πυγμαίων τὲ ἐν αὐταῖς ἔθνη, καὶ ὑλακτούντων ἄλλο ἄλλῃ· i. e. *Here are bred wild Beasts that are not in other places; and black Men, which no other Country affords:*

(b) *Gesner. Histor. Quadruped.* p. m. 885. (c) *Herodot. Melpomene seu* lib. 4. p. m. 285. (d) *Philostratus in vita Apollon. Tyanai*, lib. 6. cap. 1. p. m. 258.

and

and amongſt them is the Nation of the Pygmies, and the BARKERS, that is, the *Cynocephali*. For tho' *Philoſtratus* is pleaſed here only to call them *Barkers*, and to reckon them, as he does the *Black Men* and the *Pygmies* amongſt the *wild Beaſts* of thoſe Countreys; yet *Cteſias*, from whom *Philoſtratus* has borrowed a great deal of his *Natural Hiſtory*, ſtiles them *Men*, and makes them ſpeak, and to perform moſt notable Feats in Merchandiſing. But not being in a merry Humour it may be now, before he was aware, he ſpeaks Truth: For *Cælius Rhodiginus*'s (e) Character of him is, *Philoſtratus omnium qui unquam Hiſtoriam conſcripſerunt, mendaciſſimus.*

Since the *Pygmies* therefore are ſome of the *Brute Beaſts* that naturally breed in theſe Countries, and they are pleaſed to let us know as much, I can eaſily excuſe them a Name. Ἄνδρες ἄγριοι, or *Orang-Outang*, is alike to me; and I am better pleaſed with *Homer*'s ἄνδρες πυγμαῖοι, than if he had called πίθηκοι. Had this been the only Inſtance where they had miſapplied the Name of *Man*, methinks I could be ſo good natur'd, as in ſome meaſure to make an Apology for them. But finding them ſo extravagantly looſe, ſo wretchedly whimſical, in abuſing the Dignity of Mankind, by giving the Name of *Man* to ſuch monſtrous Productions of their idle Imaginations, as the *Indian Hiſtorians* have done, I do not wonder that wiſe Men have ſuſpected all that comes out of their Mint, to be falſe and counterfeit.

Such are their Ἀμύκτηρες or Ἄρῤῥινες, that want Noſes, and have only two holes above their Mouth; they eat all things, but they muſt be raw; they are ſhort lived; the upper part of their Mouths is very prominent. The Ἐνωτοκοῖται, whoſe Ears reach down to their Heels, on which they lye and ſleep. The Ἄστομοι, that have no Mouths, a civil ſort of People, that dwell about the Head of the *Ganges*; and live upon ſmelling to boil'd Meats and the Odours of Fruits and Flowers; they can bear no ill ſcent, and therefore can't live in a Camp. The Μονόμμαλοι or Μονόφθαλμοι, that have but one Eye, and that in the middle of their Foreheads; they have Dogs Ears; their Hair ſtands an end, but ſmooth on the Breaſts. The Στερνόφθαλμοι, that have Eyes in their Breaſts. The Πάνες σφηνοκέφαλοι with Heads like Wedges. The Μακροκέφαλοι, with great Heads. The Μακρόβιοι, who live a Thouſand years. The ὠκύποδες, ſo ſwift, that they will out-run a Horſe. The ὀπισθοδάκτυλοι, that go with their Heels forward, and their Toes backwards. The Μακροσκελεῖς, The Σπιγανόποδες, The Μονοσκελεῖς, who have one Leg, but will jump a great way, and are call'd *Sciapodes*, becauſe when they lye on their Backs, with this *Leg* they can keep off the Sun from their Bodies.

(e) *Cælij Rhodigini Lection. Antiq.* lib. 17. cap. 13.

Now

Now *Strabo* (*f*), from whom I have collected the Deſcription of theſe Monſtrous ſorts of *Men*, and they are mentioned too by *Pliny*, *Solinus*, *Mela*, *Philoſtratus*, and others; and *Munſter* in his *Coſmography* (*g*) has given a *figure* of ſome of them; *Strabo*, I ſay, who was an Enemy to all ſuch fabulous Relations, no doubt was prejudiced likewiſe againſt the *Pygmies*, becauſe theſe *Hiſtorians* had made them a Puny Race of *Men*, and invented ſo many Romances about them. I can no ways therefore blame him for denying, that there were ever any ſuch *Men Pygmies*; and do readily agree with him, that no *Man* ever ſaw them: and am ſo far from diſſenting from thoſe Great Men, who have denied them on this account, that I think they have all the reaſon in the World on their ſide. And to ſhew how ready I am to cloſe with them in this Point, I will here examine the contrary Opinion, and what Reaſons they give for the ſupporting it: For there have been ſome *Moderns*, as well as the *Ancients*, that have maintained that theſe *Pygmies* were real *Men*. And this they pretend to prove, both from *Humane Authority* and *Divine*.

Now by *Men Pygmies* we are by no means to underſtand *Dwarfs*. In all Countries, and in all Ages, there has been now and then obſerved ſuch *Miniture* of Mankind, or under-ſized Men. *Cardan* (*h*) tells us he ſaw one carried about in a Parrot's Cage, that was but a Cubit high. *Nicephorus* (*i*) tells us, that in *Theodoſius* the Emperour's time, there was one in *Ægypt* that was no bigger than a Partridge; yet what was to be admired, he was very Prudent, had a ſweet clear Voice, and a generous Mind; and lived Twenty Years. So likewiſe a King of *Portugal* ſent to a Duke of *Savoy*, when he married his Daughter to him, an *Æthiopian Dwarf* but three Palms high (*k*). And *Thevenot* (*l*) tells us of the Preſent made by the King of the *Abyſſins*, to the *Grand Seignior*, of ſeveral *little black Slaves* out of *Nubia*, and the Countries near *Æthiopia*, which being made *Eunuchs*, were to guard the Ladies of the *Seraglio*. And a great many ſuch like Relations there are. But theſe being only *Dwarfs*, they muſt not be eſteemed the *Pygmies* we are enquiring about, which are repreſented as a *Nation*, and the whole Race of them to be of the like ſtature. *Dari tamen integras Pumilionum Gentes, tam falſum eſt, quàm quod falſiſſimum*, ſaith *Harduin* (*m*).

Neither likewiſe muſt it be granted, that tho' in ſome *Climates* there might be *Men* generally of leſs ſtature, than what are to be met with in other Countries, that they are preſently *Pygmies*. *Nature* has not fixed the ſame ſtandard to the growth of *Mankind* in all Places alike, no more

(*f*) *Strabo Geograph.* lib. 15. p. m. 489. & lib. 2. p. 48. *& alibi.* (*g*) *Munſter Coſmograph.* lib. 6. p. 1151. (*h*) *Cardan de ſubtilitate*, lib. 11. p. 458. (*i*) *Nicephor. Hiſtor. Eccleſiaſt.* lib. 12. cap. 37. (*k*) *Happelius in Relat. curioſis*, N°. 85. p. 677. (*l*) *Thevenot. Voyage de Levant.* lib. 2. c. 68. (*m*) *Jo. Harduini Notæ in Plinij Nat. Hiſt.* lib. 6. cap. 22. p. 688.

than to *Brutes* or *Plants*. The Dimenſions of them all, according to the *Climate*, may differ. If we conſult the Original, *viz. Homer* that firſt mentioned the *Pygmies*, there are only theſe two *Characteriſtics* he gives of them. That they are Πυγμαῖοι *ſeu Cubitales*; and that the *Cranes* did uſe to fight them. 'Tis true, as a *Poet*, he calls them ἀνδρες, which I have accounted for before. Now if there cannot be found ſuch *Men* as are *Cubitales*, that the *Cranes* might probably fight with, notwithſtanding all the *Romances* of the *Indian Hiſtorians*, I cannot think theſe *Pygmies* to be *Men*, but they muſt be ſome other *Animals*, or the whole muſt be a Fiction.

Having premiſed this, we will now enquire into their Aſſertion that maintain the *Pygmies* to be a Race of *Men*. Now becauſe there have been *Giants* formerly, that have ſo much exceeded the uſual Stature of *Man*, that there muſt be likewiſe *Pygmies* as defective in the other extream from this Standard, I think is no concluſive Argument, tho' made uſe of by ſome. Old *Caſpar Bartholine* (*n*) tells us, that becauſe *J. Caſſanius* and others had wrote *de Gygantibus*, ſince no Body elſe had undertaken it, he would give us a Book *de Pygmæis*; and ſince he makes it his deſign to prove the Exiſtence of *Pygmies*, and that the *Pygmies* were *Men*, I muſt confeſs I expected great Matters from him.

But I do not find he has informed us of any thing more of them, than what *Jo. Talentonius*, a Profeſſor formerly at *Parma*, had told us before in his *Variarum & Reconditarum Rerum Theſaurus* (*o*), from whom he has borrowed moſt of this *Tract*. He has made it a little more formal indeed, by dividing it into *Chapters*; of which I will give you the *Titles*; and as I ſee occaſion, ſome Remarks thereon: They will not be many, becauſe I have prevented my ſelf already. The *firſt Chapter* is, *De Homuncionibus & Pumilionibus ſeu Nanis à Pygmæis diſtinctis*. The *ſecond Chapter*, *De Pygmæi nominibus & Etymologia*. The *third Chapter*, *Duplex eſſe Pygmæorum Genus; & primum Genus aliquando dari*. He means *Dwarfs*, that are no *Pygmies* at all. The *fourth Chapter* is, *Alterum Genus, nempe Gentem Pygmæorum eſſe, aut ſaltem aliquando fuiſſe Autoritatibus Humanis, fide tamen dignorum aſſeritur*. 'Tis as I find it printed; and no doubt an Error in the printing. The Authorities he gives, are, *Homer*, *Cteſias*, *Ariſtotle*, *Philoſtratus*, *Pliny*, *Juvenal*, *Oppian*, *Baptiſta Mantuan*, St. *Auſtin* and his *Scholiaſt*. *Ludovic. Vives*, *Jo. Laurentius Anania*, *Joh. Caſſanius*, *Joh. Talentonius*, *Gellius*, *Pomp. Mela*, and *Olaus Magnus*. I have taken notice of moſt of them already, as I ſhall of St. *Auſtin* and *Ludovicus Vives* by and by. *Jo. Laurentius Anania* (p) *ex Mercatorum relatione tradit* (ſaith *Bartholine*) eos (*ſc. Pygmæos*) *in Septentrionali Thraciæ Parte reperiri, (quæ Scythiæ eſt proxima) atque ibi cum Gruibus pugnare*. And *Joh. Caſſanius* (q) (as he is here quoted) ſaith,

(n) *Caſpar. Bartholin. Opuſculum de Pygmæis.* (o) *Jo. Talentonij Variar. & recondit. Rerum Theſaurus*, lib. 3. cap. 21. (p) *Joh. Laurent. Anania prope finem tractatus primi ſuæ Geograph.* (q) *Joh. Caſſanius libello de Gygantibus*, p. 73.

De

De Pygmæis fabuloſa quidem eſſe omnia, quæ de iis narrari ſolent, aliquando exiſtimavi. Verùm cum videam non unum vel alterum, ſed complures Claſſicos & probatos Autores de his Homunculis multa in eandem fere Sententiam tradidiſſe; eò adducor ut Pygmæos fuiſſe inficiari non auſim. He next brings in *Jo. Talentonius*, to whom he is ſo much beholden, and quotes his Opinion, which is full and home, *Conſtare arbitror* (ſaith *Talentonius*) (r) *debere concedi, Pygmæos non ſolùm olim fuiſſe, ſed nunc etiam eſſe, & homines eſſe, nec parvitatem illis impedimento eſſe quo minùs ſint & homines ſint.* But were there ſuch *Men Pygmies* now in being, no doubt but we muſt have heard of them; ſome or other of our Saylors, in their Voyages, would have lighted on them. Tho' *Ariſtotle* is here quoted, yet he does not make them *Men*; So neither does *Anania:* And I muſt own, tho' *Talentonius* be of this Opinion, yet he takes notice of the faulty Tranſlation of this Text of *Ariſtotle* by *Gaza:* and tho' the parvity or lowneſs of Stature, be no Impediment, becauſe we have frequently ſeen ſuch *Dwarf-Men*, yet we did never ſee a *Nation* of them: For then there would be no need of that *Talmudical* Precept which *Job. Ludolphus* (s) mentions, *Nanus ne ducat Nanam, ne fortè oriatur ex iis Digitalis* (in *Bechor.* fol. 45.)

I had almoſt forgotten *Olaus Magnus*, whom *Bartholine* mentions in the cloſe of this Chapter, but lays no great ſtreſs upon his Authority, becauſe he tells us, he is fabulous in a great many other Relations, and he writes but by hear-ſay, that the *Greenlanders* fight the *Cranes*; *Tandem* (ſaith *Bartholine*) *neque ideo Pygmæi ſunt, ſi fortè ſagittis & haſtis, ſicut alij homines, Grues conficiunt & occidunt.* This I think is great Partiality: For *Cteſias*, an Author whom upon all turns *Bartholine* makes uſe of as an Evidence, is very poſitive, that the *Pygmies* were excellent *Archers:* ſo that he himſelf owns, that their being ſuch, illuſtrates very much that *Text* in *Ezekiel*, on which he ſpends good part of the next *Chapter*, whoſe Title is, *Pygmæorum Gens ex Ezekiele, atque rationibus probabilibus adſtruitur*; which we will conſider by and by. And tho' *Olaus Magnus* may write ſome things by hear-ſay, yet he cannot be ſo fabulous as *Cteſias*, who (as *Lucian* tells us) writes what he neither ſaw himſelf, or heard from any Body elſe. Not that I think *Olaus Magnus* his *Greenlanders* were real *Pygmies*, no more than *Cteſias* his *Pygmies* were real *Men*; tho' he vouches very notably for them. And if all that have copied this Fable from *Cteſias*, muſt be look'd upon as the ſame Evidence with himſelf; the number of the *Teſtimonies* produced need not much concern us, ſince they muſt all ſtand or fall with him.

The *probable Reaſons* that *Bartholine* gives in the *fifth Chapter*, are taken from other *Animals*, as Sheep, Oxen, Horſes, Dogs, the *Indian Formica* and Plants: For obſerving in the ſame *Species* ſome exceſſive large,

(r) *Jo. Talentonius Variar. & recondit. Rerum Theſaurus*, lib 3. cap. 21. p. m. 515. (s) *Job Ludolphi Comment. in Hiſtoriam Æthiopic.* p. m. 71.

and others extreamly little, he infers, *Quæ certè cum in Animalibus & Vegetabilibus fiant; cur in Humana ſpecie non ſit probabile, haud video: imprimis cum detur magnitudinis exceſſus Gigantæus; cur non etiam dabitur Defectus? Quia ergo dantur Gigantes, dabuntur & Pygmæi. Quam conſequentiam ut firmam, admittit Cardanus,* (t) *licet de Pygmæis hoc tantùm concedat, qui pro miraculo, non pro Gente.* Now *Cardan*, tho' he allows this Conſequence, yet in the ſame place he gives ſeveral Reaſons why the *Pygmies* could not be *Men*, and looks upon the whole Story as fabulous. *Bartholine* concludes this *Chapter* thus: *Ulteriùs ut Probabilitatem fulciamus, addendum Sceleton Pygmæi, quod* Dreſdæ *vidimus inter alia plurima, ſervatum in Arce ſereniſſ.* Electoris Saxoniæ, *altitudine infra Cubitum, Oſſium ſoliditate, proportioneque tum Capitis, tum aliorum; ut Embrionem, aut Artificiale quid Nemo rerum peritus ſuſpicari poſſit. Addita inſuper eſt Inſcriptio* Veri Pygmæi. I hereupon looked into Dr. *Brown*'s Travels into thoſe Parts, who has given us a large Catalogue of the Curioſities, the *Elector* of *Saxony* had at *Dreſden*, but did not find amongſt them this *Sceleton*; which, by the largeneſs of the Head, I ſuſpect to be the *Sceleton* of an *Orang-Outang*, or our *wild Man*. But had he given us either a Figure of it, or a more particular Deſcription, it had been a far greater Satisfaction.

The Title of *Bartholine*'s *ſixth Chapter* is, *Pygmæos eſſe aut fuiſſe ex variis eorum adjunctis, accidentibus*, &c. *ab Authoribus deſcriptis oſtenditur.* As firſt, their *Magnitude:* which he mentions from *Cteſias*, *Pliny*, *Gellias* and *Juvenal*; and tho' they do not all agree exactly, 'tis nothing. *Autorum hic diſſenſus nullus eſt* (ſaith *Bartholine*) *etenim ſicut in noſtris hominibus, ita indubiè in Pygmæis non omnes ejuſdem magnitudinis.* 2. The *Place* and *Country:* As *Cteſias* (he ſaith) places them in the middle of *India*; *Ariſtotle* and *Pliny* at the Lakes above *Ægypt*; *Homer*'s *Scholiaſt* in the middle of *Ægypt*; *Pliny* at another time ſaith they are at the Head of the *Ganges*, and ſometimes at *Gerania*, which is in *Thracia*, which being near *Scythia*, confirms (he ſaith) *Anania*'s *Relation*. *Mela* places them at the *Arabian Gulf*; and *Paulus Jovius docet Pygmæos ultra Japonem eſſe*; and adds, *has Autorum diſſenſiones facile fuerit conciliare; nec mirum diverſas relationes à* Plinio *auditas.* For (ſaith he) as the *Tartars* often change their Seats, ſince they do not live in Houſes, but in Tents, ſo 'tis no wonder that the *Pygmies* often change theirs, ſince inſtead of Houſes they live in Caves or Huts, built of Mud, Feathers, and Eggſhels. And this mutation of their Habitations he thinks is very plain from *Pliny*, where ſpeaking of *Gerania*, he ſaith, *Pygmæorum Gens* fuiſſe *(non jam eſſe) proditur, creduntque à Gruibus fugatos.* Which paſſage (ſaith *Bartholine*) had *Adrian Spigelius* conſidered, he would not ſo ſoon have left *Ariſtotle*'s Opinion, becauſe *Franc. Alvares* the *Portugueſe* did not find them in the place where *Ariſtotle* left them; for the *Cranes*, it

(t) *Cardan. de Rerum varietate*, lib. 8. cap. 40.

may

may be, had driven them thence. His third Article is, their *Habitation*, which *Ariſtotle* ſaith is in *Caves*; hence they are *Troglodytes*. *Pliny* tells us they build Huts with Mud, Feathers, and Egg-ſhells. But what *Bartholine* adds, *Eò quod Terræ Cavernas inhabitent, non injuriâ dicti ſunt olim Pygmæi, Terræ filii*, is wholly new to me, and I have not met with it in any Author before: tho' he gives us here ſeveral other ſignifications of the word *Terræ filij* from a great many Authors, which I will not trouble you at preſent with. 4. The *Form*, being flat noſed and ugly, as *Cteſias*. 5. Their *Speech*, which was the ſame as the *Indians*, as *Cteſias*; and for this I find he has no other Author. 6. Their *Hair*; where he quotes *Cteſias* again, that they make uſe of it for *Clothes*. 7. Their *Vertues and Arts*; as that they uſe the ſame Laws as the *Indians*, are very juſt, excellent Archers, and that the King of *India* has Three thouſand of them in his Guards. All from *Cteſias*. 8. Their *Animals*, as in *Cteſias*; and here are mentioned their Sheep, Oxen, Aſſes, Mules, and Horſes. 9. Their various *Actions*; as what *Cteſias* relates of their killing Hares and Foxes with Crows, Eagles, *&c.* and fighting the *Cranes*, as *Homer*, *Pliny*, *Juvenal*.

The *ſeventh Chapter* in *Bartholine* has a promiſing Title, *An Pygmæi ſint homines*, and I expected here ſomething more to our purpoſe; but I find he rather endeavours to anſwer the Reaſons of thoſe that would make them *Apes*, than to lay down any of his own to prove them *Men*. And *Albertus Magnus*'s Opinion he thinks abſurd, that makes them part Men part Beaſts; they muſt be either one or the other, not a *Medium* between both; and to make out this, he gives us a large Quotation out of *Cardan*. But *Cardan* (u) in the ſame place argues that they are not Men. As to *Sueſſanus* (w) his Argument, that they want *Reaſon*, this he will not grant; but if they uſe it leſs, or more imperfectly than others (which yet, he ſaith, is not certain) by the ſame parity of Reaſon, *Children*, the *Bœotians*, *Cumani* and *Naturals* may not be reckoned *Men*; and he thinks, what he has mentioned in the preceding *Chapter* out of *Cteſias*, &c. ſhews that they have no ſmall uſe of Reaſon. As to *Sueſſanus*'s next Argument, that they want Religion, Juſtice, *&c.* this, he ſaith, is not confirmed by any grave Writer; and if it was, yet it would not prove that they are not *Men*. For this defect (he ſaith) might hence happen, becauſe they are forced to live in *Caves* for fear of the *Cranes*; and others beſides them, are herein faulty. For this Opinion, that the *Pygmies* were *Apes* and not *Men*, he quotes likewiſe *Benedictus Varchius* (x), and *Joh. Tinnulus* (y), and *Paulus Jovius* (z), and ſeveral others of the Moderns, he tells us, are of the ſame mind. *Imprimis Geographici quos non puduit in Mappis Geographicis loco Pygmæorum ſimias cum Gruibus pugnantes ridiculè dipinxiſſe.*

(u) *Cardan. de Rerum varietate*, lib. 8. cap. 40. (w) *Sueſſanus Comment. in Ariſt. de Hiſtor. Animal.* lib. 8. cap. 12. (x) *Benedict. Varchius de Monſtris, lingua vernacula.* (y) *Joh. Tinnulus in Glotto. Chriſio.* (z) *Paulus Jovius lib. de Muſcovit. Legatione.*

The

The Title of *Bartholine's eighth* and laſt *Chapter* is, *Argumenta eorum qui Pygmæorum Hiſtoriam fabuloſam cenſent, recitantur & refutantur.* Where he tells us, the only Perſon amongſt the Ancients that thought the Story of the *Pygmies* to be fabulous was *Strabo*; but amongſt the Moderns there are ſeveral, as *Cardan*, *Budæus*, *Aldrovandus*, *Fullerus* and others. The firſt Objection (he ſaith) is that of *Spigelius* and others; that ſince the whole World is now diſcovered, how happens it, that theſe *Pygmies* are not to be met with? He has ſeven Anſwers to this Objection; how ſatisfactory they are, the Reader may judge, if he pleaſes, by peruſing them amongſt the Quotations (*a*). *Cardan*'s ſecond Objection (he ſaith) is, that they live but eight years, whence ſeveral Inconveniences would happen, as *Cardan* ſhews; he anſwers that no good Author aſſerts this; and if there was, yet what *Cardan* urges would not follow; and inſtances out of *Artemidorus* in *Pliny* (*b*), as a *Parallel* in the *Calingæ* a Nation of *India*, *where the Women conceive when five years old, and do not live above eight.* *Geſner* ſpeaking of the *Pygmies*, ſaith, *Vitæ autem longitudo anni arciter octo ut* Albertus *refert.* *Cardan* perhaps had his Authority from *Albertus*, or it may be both took it from this paſſage in *Pliny*, which I think would better agree to *Apes* than *Men*. But *Artemidorus* being an *Indian Hiſtorian*, and in the ſame place telling other Romances, the leſs Credit is to be given to him. The third Objection, he ſaith, is of *Cornelius à Lapide*, who denies the *Pygmies*, becauſe *Homer* was the firſt Author of them. The fourth Objection he ſaith is, becauſe Authors differ about the Place where they ſhould be: This, he tells us, he has anſwered already in the fifth Chapter. The *fifth* and laſt Objection he mentions is, that but few have ſeen them. He anſwers, there are a great many Wonders in Sacred and Profane Hiſtory that we have not ſeen, yet muſt not deny. And he inſtances in three; As the *Formicæ Indicæ*, which are as bigs as great Dogs: The *Cornu Plantabile* in the Iſland *Goa*, which when cut off from the Beaſt, and flung upon the Ground, will take root like a *Cabbage*: And the *Scotland Geeſe* that grow upon Trees, for which he quotes a great many Authors, and ſo concludes.

Now how far *Bartholine* in this Treatiſe has made out that the *Pygmies* of the Ancients were real *Men*, either from the Authorities he has quoted, or his Reaſonings upon them, I ſubmit to the Reader. I ſhall proceed now (as I promiſed) to conſider the Proof they pretend from *Ho-*

(a) *Reſpondeo* 1. *Contrarium teſtari Mercatorum Relationem apud* Ananiam *ſupra Cap.* 4. 2. *Et licet non inventi eſſent vivi à quolibet, pari jure Monocerota & alia negare liceret.* 3. *Qui maria pernavigant, vix oras paucas maritimas luſtrant, adeò non terras omnes à mari diſſitas.* 4. *Neque in Oris illos habitare maritimis ex Capite quinto manifeſtum eſt.* 5. *Quis teſtatum ſe omnem adhibuiſſe diligentiam in inquirendo eos ut inveniret.* 6 *Ita in terra habitant, ut in Antris vitam tolerare dicantur.* 7. *Si vel maximè omni ab omnibus diligentia quæſiti fuiſſent, nec inventi; fieri poteſt, ut inſtar Gigantum jam deſierint nec ſint amplius.*

(b) *Plinij Hiſt. Nat.* lib. 7. cap. 2. p. m. 14.

ly

ly Writ: For *Bartholine* and others inſiſt upon that *Text* in *Ezekiel* (*Cap.* 27. *Verſ.* 11.) where the *Vulgar* Tranſlation has it thus; *Filij Arvad cum Exercitu tuo ſupra Muros tuos per circuitum, & Pygmæi in Turribus tuis fuerunt; Scuta ſua ſuſpenderunt ſupra Muros tuos per circuitum.* Now *Talentonius* and *Bartholine* think that what *Cteſias* relates of the *Pygmies*, as their being good *Archers*, very well illuſtrates this Text of *Ezekiel:* I ſhall here tranſcribe what Sir *Thomas Brown* (*c*) remarks upon it; and if any one requires farther Satisfaction, they may conſult *Job Ludolphus*'s *Comment* on his *Æthiopic Hiſtory* (*d*).

The ſecond Teſtimony (ſaith Sir *Thomas Brown*) *is deduced from Holy Scripture; thus rendered in the Vulgar Tranſlation,* Sed & Pygmæi qui erant in turribus tuis, pharetras ſuas ſuſpenderunt in muris tuis per gyrum: *from whence notwithſtanding we cannot infer this Aſſertion, for firſt the Tranſlators accord not, and the Hebrew word* Gammadim *is very variouſly rendered. Though* Aquila, Vatablus *and* Lyra *will have it* Pygmæi, *yet in the* Septuagint, *it is no more then Watchmen; and ſo in the* Arabick *and* High-Dutch. *In the* Chalde, Cappadocians, *in* Symmachus, Medes, *and in the* French, *thoſe of* Gamed. Theodotian *of old, and* Tremellius *of late, have retained the Textuary word; and ſo have the* Italian, Low Dutch *and* Engliſh *Tranſlators, that is, the Men of* Arvad *were upon thy Walls round about, and the* Gammadims *were in thy Towers.*

Nor do Men only diſſent in the Tranſlation of the word, but in the Expoſition of the Senſe and Meaning thereof; for ſome by Gammadims *underſtand a People of* Syria, *ſo called from the City of* Gamala; *ſome hereby underſtand the* Cappadocians, *many the* Medes: *and hereof* Forerius *hath a ſingular Expoſition, conceiving the Watchmen of* Tyre, *might well be called* Pygmies, *the Towers of that City being ſo high, that unto Men below, they appeared in a Cubital Stature. Others expound it quite contrary to common Acception, that is not Men of the leaſt, but of the largeſt ſize; ſo doth* Cornelius *conſtrue* Pygmæi, *or* Viri Cubitales, *that is, not Men of a Cubit high, but of the largeſt Stature, whoſe height like that of Giants, is rather to be taken by the Cubit than the Foot; in which phraſe we read the meaſure of* Goliah, *whoſe height is ſaid to be ſix Cubits and a ſpan. Of affinity hereto is alſo the Expoſition of* Jerom; *not taking* Pygmies *for Dwarfs, but ſtout and valiant Champions; not taking the ſenſe of* πυγμὴ, *which ſignifies the Cubit meaſure, but that which expreſſeth Pugils; that is, Men fit for Combat and the Exerciſe of the Fiſt. Thus can there be no ſatisfying illation from this Text, the diverſity, or rather contrariety of Expoſitions and Interpretations, diſtracting more than confirming the Truth of the Story.*

But why *Aldrovandus* or *Caſpar Bartholine* ſhould bring in St. *Auſtin* as a Favourer of this Opinion of *Men Pygmies*, I ſee no Reaſon. To me

(c) Sir *Thomas Brown*'s *Enquiries into Vulgar Errors*, lib. 4. cap. 11. p. 242. (d) *Comment. in Hiſt. Æthiopic.* p. 73.

he

he ſeems to aſſert quite the contrary: For propoſing this Queſtion, *An ex propagine* Adam *vel filiorum* Noe, *quædam genera Hominum Monſtroſa prodierunt?* He mentions a great many monſtrous Nations of *Men*, as they are deſcribed by the *Indian Hiſtorians*, and amongſt the reſt, the *Pygmies*, the *Sciopodes*, &c. And adds, *Quid dicam de* Cynocephalis, *quorum Canina Capita atque ipſe Latratus magis Beſtias quàm Homines confitentur? Sed omnia Genera Hominum, quæ dicuntur eſſe, eſſe credere, non eſt neceſſe.* And afterwards ſo fully expreſſes himſelf in favour of the *Hypotheſis* I am here maintaining, that I think it a great Confirmation of it. *Nam & Simias* (ſaith he) *& Cercopithecos, & Sphingas, ſi neſciremus non Homines eſſe, ſed Beſtias, poſſent iſti Hiſtorici de ſua Curioſitate gloriantes velut Gentes aliquas Hominum nobis impunitâ vanitate mentiri.* At laſt he concludes and determines the Queſtion thus, *Aut illa, quæ talia de quibuſdam Gentibus ſcripta ſunt, omnino nulla ſunt, aut ſi ſunt, Homines non ſunt, aut ex* Adam *ſunt ſi homines ſunt.*

There is nothing therefore in St. *Auſtin* that juſtifies the being of *Men Pygmies*, or that the *Pygmies* were *Men*; he rather makes them *Apes*. And there is nothing in his *Scholiaſt Ludovicus Vives* that tends this way, he only quotes from other Authors, what might illuſtrate the Text he is commenting upon, and no way aſſerts their being *Men*. I ſhall therefore next enquire into *Bochartus*'s Opinion, who would have them to be the *Nubæ* or *Nobæ*. *Hos Nubas Troglodyticos* (ſaith (e) he) *ad Avalitem Sinum eſſe Pygmæos Veterum multa probant.* He gives us five Reaſons to prove this. As, 1. The Authority of *Heſychius*, who ſaith Νῶβαι Πυγμαῖοι. 2. Becauſe *Homer* places the *Pygmies* near the Ocean, where the *Nubæ* were. 3. *Ariſtotle* places them at the Lakes of the *Nile*. Now by the *Nile Bochartus* tells us, we muſt underſtand the *Aſtaboras*, which the Ancients thought to be a Branch of the *Nile*, as he proves from *Pliny*, *Solinus* and *Æthicus*. And *Ptolomy* (he tells us) places the *Nubæ* hereabout 4. Becauſe *Ariſtotle* makes the *Pygmies* to be *Troglodytes*, and ſo were the *Nubæ*. 5. He urges that Story of *Nonnoſus* which I have already mentioned, and thinks that thoſe that *Nonnoſus* met with, were a Colony of the *Nubæ*; but afterwards adds, *Quos tamen abſit ut putemus Staturâ fuiſſe Cubitali, prout Poetæ fingunt, qui omnia in majus augent.* But this methinks ſpoils them from being *Pygmies*; ſeveral other Nations at this rate may be *Pygmies* as well as theſe *Nubæ*. Beſides, he does not inform us, that theſe *Nubæ* uſed to fight the *Cranes*; and if they do not, and were not *Cubitales*, they can't be *Homer*'s *Pygmies*, which we are enquiring after. But the Notion of their being *Men*, had ſo poſſeſſed him, that it put him upon fancying they muſt be the *Nubæ*; but 'tis plain that thoſe in *Nonnoſus* could not be a Colony of the *Nubæ*; for then the *Nubæ* muſt have underſtood their Language, which the

(e) *Sam. Bochart. Geograph. Sacra*, Part. 1. lib. 2. cap. 23. p. m. 142.

Text

Text ſaith, none of the Neighbourhood did. And becauſe the *Nubæ* are *Troglodytes*, that therefore they muſt be *Pygmies*, is no Argument at all. For *Troglodytes* here is uſed as an *Adjective*, and there is a ſort of *Sparrow* which is called *Paſſer Troglodytes*. Not but that in *Africa* there was a Nation of *Men* called *Troglodytes*, but quite different from our *Pygmies*. How far *Bochartus* may be in the right, in gueſſing the Lakes of the *Nile* (whereabout *Ariſtotle* places the *Pygmies*) to be the Fountains of the River *Aſtaboras*, which in his deſcription, and likewiſe the *Map*, he places in the Country of the *Avalitæ*, near the *Moſſylon Emporium*; I ſhall not enquire. This I am certain of, he miſrepreſents *Ariſtotle* where he tells us (*f*), *Quamvis in ea fabula hoc ſaltem verum eſſe aſſerat Philoſophus, Puſillos Homines in iis locis degere:* for as I have already obſerved; *Ariſtotle* in that *Text* ſaith nothing at all of their being *Men:* the contrary rather might be thence inferred, that they were *Brutes*. And *Bochart*'s Tranſlation, as well as *Gaza*'s is faulty here, and by no means to be allowed, *viz. Ut aiunt, genus ibi parvum eſt tam Hominum, quàm Equorum*; which had *Bochartus* conſidered, he would not have been ſo fond it may be of his *Nubæ*. And if the Νᾶες Πυγμαῖοι in *Heſychius* are ſuch *Pygmies* as *Bochartus* makes his *Nubæ*, *Quos tamen abſit ut putemus ſtaturâ fuiſſe Cubitali*, it will not do our buſineſs at all; and neither *Homer*'s Authority, nor *Ariſtotle*'s does him any Service.

But this Fable of *Men Pygmies* has not only obtained amongſt the *Greeks* and *Indian Hiſtorians:* the *Arabians* likewiſe tell much ſuch Stories of them, as the ſame learned *Bochartus* informs us. I will give his Latin Tranſlation of one of them, which he has printed in *Arabick* alſo: *Arabes idem* (ſaith (*g*) *Bochartus*) *referunt ex cujuſdam* Græculi *fide, qui* Jacobo Iſaaci *filio*, Sigarienſi *fertur ita narraſſe. Navigabam aliquando in mari* Zingitano, *& impulit me ventus in quandam Inſulam. In cujus Oppidum cum deveniſſem, reperi Incolas Cubitalis eſſe ſtaturæ, & pleroſque Cœlites. Quorum multitudo in me congregata me deduxit ad Regem ſuum. Juſſit is, ut Captivus detinerer; & in quandam Caveæ ſpeciem conjectus ſum; eos autem aliquando ad bellum inſtrui cum viderem, dixerunt Hoſtem imminere, & fore ut propediem ingrueret. Nec multò poſt Gruum exercitus in eos inſurrexit. Atque ideo erant Cœlites, quod eorum oculos hæ confodiſſent. Atque Ego, virgâ aſſumptâ, in eas impetum feci, & illæ avolârunt atque aufugerunt; ob quod facinus in honore fui apud illos.* This Author, it ſeems, repreſents them under the ſame Misfortune with the *Poet*, who firſt mentioned them, as being blind, by having their Eyes peck'd out by their cruel Enemies. Such an Accident poſſibly might happen now and then, in theſe bloody Engagements, tho' I wonder the *Indian Hiſtorians* have not taken notice of it. However the *Pygmies* ſhewed themſelves grateful to their Deliverer, in heaping *Honours* on him. One would gueſs,

(f) *Bocharti Hierozoici pars Poſterior*, lib. 1. cap. 11. p. 76. (g) *Bochartus ibid.* p. m. 77.

for their own ſakes, they could not do leſs than make him their *Generaliſſimo*; but our Author is modeſt in not declaring what they were.

Iſaac Voſſius ſeems to unſettle all, and endeavours utterly to ruine the whole Story: for he tells us, If you travel all over *Africa*, you ſhall not meet with either a *Crane* or *Pygmie*: *Se mirari* (ſaith (*h*) *Iſaac Voſſius*) Ariſtotelem, *quod tam ſeriò affirmet non eſſe fabellam, quæ de Pygmæis & Bello, quod cum Gruibus gerant, narrantur. Si quis totam pervadat* Africam, *nullas vel Grues vel Pygmæos inveniet.* Now one would wonder more at *Voſſius*, that he ſhould aſſert this of *Ariſtotle*, which he never ſaid. And ſince *Voſſius* is ſo miſtaken in what he relates of *Ariſtotle*; where he might ſo eaſily have been in the right, 'tis not improbable, but he may be out in the reſt too: For who has travelled all *Africa* over, that could inform him? And why ſhould he be ſo peremptory in the Negative, when he had ſo poſitive an Affirmation of *Ariſtotle* to the contrary? or if he would not believe *Ariſtotle*'s Authority, methinks he ſhould *Ariſtophanes*'s, who tells us (*i*), Σπείρειν ὅταν μὲν Γέρανος κραίζων ἰς τὸν λιβυϊκὸν μεταχωρῇ. *'Tis time to ſow when the noiſy Cranes take their flight into* Libya. Which Obſervation is likewiſe made by *Heſiod*, *Theognis*, *Aratus*, and others. And *Maximus Tyrius* (as I find him quoted in *Bochartus*) ſaith, Αἱ γέρανοι ἐξ Αἰγύπτου ὥρᾳ θέρους ἀφιζάμεναι, ὑπ' ἀνεχόμεναι τὸ θάλπος, πτάσαι πλήμυρας ὥσπερ ἱστία, φέρονται διὰ τοῦ ἀέρος ἐπὶ τὴν Σκυθῶν γῆν. i. e. *Grues per æſtatem ex* Ægypto *abſcedentes, quia Calorem pati non poſſunt, alis velorum inſtar expanſis, per aerem ad* Scythicam *plagam rectà feruntur.* Which fully confirms that Migration of the *Cranes* that *Ariſtotle* mentions.

But *Voſſius* I find, tho' he will not allow the *Cranes*, yet upon ſecond Thoughts did admit of *Pygmies* here: For this Story of the *Pygmies* and the *Cranes* having made ſo much *noiſe*, he thinks there may be ſomething of truth in it; and then gives us his Conjecture, how that the *Pygmies* may be thoſe *Dwarfs*, that are to be met with beyond the Fountains of the *Nile*; but that they do not fight *Cranes* but *Elephants*, and kill a great many of them, and drive a conſiderable Traffick for their Teeth with the *Jagi*, who ſell them to thoſe of *Congo* and the *Portugueſe*. I will give you *Voſſius*'s own words; *Attamen* (ſaith (*k*) he) *ut ſolent fabellæ non de nihilo fingi & aliquod plerunque continent veri, id ipſum quoque hic factum eſſe exiſtimo. Certum quippe eſt ultra* Nili *fontes multos reperiri* Nanos, *qui tamen non cum Gruibus, ſed cum Elephantis perpetuum gerant bellum. Præcipuum quippe Eboris commercium in regno magni* Macoki *per iſtos tranſigitur Homunciones; habitant in Sylvis, & mira dexteritate Elephantos ſagittis conficiunt. Carnibus veſcuntur, Dentes verò* Jagis *divendunt, illi autem* Congentibus & Luſitanis.

(h) *Iſaac Voſſius de Nili aliorumque fluminum Origine*, Cap. 18.
(i) *Ariſtophanes in Nubibus.*
(k) *Iſaac Voſſius ibid.*

Job

Job Ludolphus (l) in his *Commentary* on his *Æthiopick History* remarks, That there was never known a Nation all of *Dwarfs*. *Nani quippe* (ſaith *Ludolphus*) *Naturæ quodam errore ex aliis juſtæ ſtaturæ hominibus generantur. Qualis verò ea Gens ſit, ex qua iſta Naturæ Ludibria tantâ copiâ proveniant, Voſſium docere oportebat, quia Pumiliones Pumiles alios non gignunt, ſed plerunque ſteriles ſunt, experientia teſte; ut planè non opus habuerunt Doctores Talmudici Nanorum matrimonia prohibere, ne Digitales ex iis naſcerentur.* *Ludolphus* it may be is a little too ſtrict with *Voſſius* for calling them *Nani*; he may only mean a ſort of Men in that Country of leſs Stature than ordinary. And *Dapper* in his Hiſtory of *Africa*, from whom *Voſſius* takes this Account, deſcribes ſuch in the Kingdom of *Mokoko*, he calls *Mimos*, and tells us that they kill *Elephants*. But I ſee no reaſon why *Voſſius* ſhould take theſe Men for the *Pygmies* of the Ancients, or think that they gave any occaſion or ground for the inventing this Fable, if there was no other reaſon, this was ſufficient, becauſe they were able to kill the *Elephants*. The *Pygmies* were ſcarce a Match for the *Cranes*; and for them to have encountred an *Elephant*, were as vain an Attempt, as the *Pygmies* were guilty of in *Philoſtratus* (m), 'who to re-
'venge the Death of *Antæus*, having found *Hercules* napping in *Libya*,
'muſtered up all their Forces againſt him. One *Phalanx* (he tells us) aſ-
'ſaulted his left hand; but againſt his right hand, that being the ſtron-
'ger, two *Phalanges* were appointed. The Archers and Slingers beſieg-
'ed his feet, admiring the hugeneſs of his Thighs: But againſt his Head,
'as the Arſenal, they raiſed Batteries, the King himſelf taking his Poſt
'there. They ſet fire to his Hair, put Reaping-hooks in his Eyes; and
'that he might not breath, clapp'd Doors to his Mouth and Noſtrils;
'but all the Execution that they could do, was only to awake him,
'which when done, deriding their folly, he gather'd them all up into his
'Lion's Skin, and carried them (*Philoſtratus* thinks) to *Euriſthenes*. This *Antæus* was as remarkable for his height, as the *Pygmies* were for their lowneſs of Stature: For *Plutarch* (n) tells us, that *Q. Sertorius* not being willing to truſt Common Fame, when he came to *Tingis* (now *Tangier*) he cauſed *Antæus*'s Sepulchre to be opened, and found his Corps full threeſcore Cubits long. But *Sertorius* knew well enough how to impoſe upon the Credulity of the People, as is evident from the Story of his *white Hind*, which *Plutarch* likewiſe relates.

But to return to our *Pygmies*; tho' moſt of the great and learned Men would ſeem to decry this Story as a Fiction and meer Fable, yet there is ſomething of Truth, they think, muſt have given the firſt riſe to it, and that it was not wholly the product of Phancy, but had ſome real foundation, tho' diſguiſed, according to the different Imagination and *Genius*

(l) *Job Ludolphus in Comment. in Hiſtoriam Æthiopicam*, p. m. 71. (m) *Philoſtratus. Icon.* lib. 2. p. m. 817. (n) *Plutarch. in vita Q. Sertorij.*

of the *Relator:* 'Tis this that has incited them to give their ſeveral Conjectures about it. *Job Ludolphus* finding what has been offered at in Relation to the *Pygmies*, not to ſatisfie, he thinks he can better account for this Story, by leaving out the *Cranes*, and placing in their ſtead, another ſort of Bird he calls the *Condor*. I will give you his own words: *Sed ad Pygmæos* (ſaith (*o*) *Ludolphus*) *revertamur; fabula de Geranomachia Pygmæorum ſeu pugna cum Gruibus etiam aliquid de vero trahere videtur, ſi pro Gruibus* Condoras *intelligas, Aves in interiore* Africa *maximas, ut fidem penè excedat; aiunt enim quod Ales iſta vitulum Elephanti in Aerem extollere poſſit; ut infra docebimus. Cum his Pygmæos pugnare, ne pecora ſua rapiant, incredibile non eſt. Error ex eo natus videtur, quod primus Relator, alio vocabulo deſtitutus, Grues pro Condoris nominârit, ſicuti* Plautus *Picos pro Gryphibus, &* Romani *Boves Lucas pro Elephantis dixere.*

'Tis true, if what *Juvenal* only in ridicule mentions, was to be admitted as a thing really done, that the *Cranes* could fly away with a *Pygmie*, as our *Kites* can with a Chicken, there might be ſome pretence for *Ludovicus*'s *Condor* or *Cunctor:* For he mentions afterwards (*p*) out of *P. Joh. dos Santos* the *Portugueſe*, that 'twas obſerved that one of theſe *Condors* once flew away with an Ape, Chain, Clog and all, about ten or twelve pounds weight, which he carried to a neighbouring Wood, and there devoured him. And *Garcilaſſo de la Vega* (*q*) relates that they will ſeize and fly away with a Child ten or twelve years old. But *Juvenal* (*r*) only mentions this in ridicule and merriment, where he ſaith,

Ad ſubitas Thracum volucres, nubemque ſonoram
Pygmæos parvis currit Bellator in armis:
Mox impar hoſti, raptuſque per aera curvis
Unguibus à ſævâ fertur Grue.

Beſides, were the *Condors* to be taken for the *Cranes*, it would utterly ſpoil the *Pygmæomachia*; for where the Match is ſo very unequal, 'tis impoſſible for the *Pygmies* to make the leaſt ſhew of a fight. *Ludolphus* puts as great hardſhips on them, to fight theſe *Condors*, as *Voſſius* did, in making them fight *Elephants*, but not with equal Succeſs; for *Voſſius*'s *Pygmies* made great Slaughters of the *Elephants*; but *Ludolphus* his *Cranes* ſweep away the *Pygmies*, as eaſily as an *Owl* would a *Mouſe*, and eat them up into the bargain; now I never heard the *Cranes* were ſo cruel and barbarous to their Enemies, tho' there are ſome Nations in the World that are reported to do ſo.

Moreover, theſe *Condor*'s I find are very rare to be met with; and

(*o*) *Job Ludolphus Comment. in Hiſtoriam ſuam Æthiopic.* p. 73. (*p*) *Job Ludolphus ibid.* pag. 164.
(*q*) *Garcilaſſo de la Vega Royal Comment. of* Peru. (*r*) *Juvenal Satyr.* 13. *verſ.* 167.

when

when they are, they often appear ſingle, or but a few. Now *Homer*'s, and the *Cranes* of the Ancients, are always repreſented in Flocks. Thus *Oppian* (*s*) as I find him tranſlated into Latin Verſe :

Et velut Æthiopum veniunt, Nilique fluenta
Turmatim Palamedis Aves, celſæque per altum
Aera labentes fugiunt Athlanta nivoſum,
Pygmæos imbelle Genus, parvumque fatigant,
Non perturbato procedunt ordine denſæ
Inſtructis volucres obſcurant aëra Turmis.

To imagine theſe *Grues* a ſingle Gigantick Bird, would much leſſen the Beauty of *Homer*'s *Simile*, and would not have ſerved his turn ; and there are none who have borrowed *Homer*'s fancy, but have thought ſo. I will only farther inſtance in *Baptiſta Mantuan :*

Pygmæi breve vulgus, iners Plebecula, quando
Convenere Grues longis in prælia roſtris,
Sublato clamore fremunt, dumque agmine magno
Hoſtibus occurrit, tellus tremit Indica, clamant
Littora, arenarum nimbis abſconditur aër ;
Omnis & involvit Pulvis ſolemque, Polumque,
Et Genus hoc Hominum naturâ imbelle, quietum,
Mite, facit Mavors pugnax, immane Cruentum.

Having now conſidered and examined the various Opinions of theſe learned Men concerning this *Pygmæomachia* ; and repreſented the Reaſons they give for maintaining their Conjectures ; I ſhall beg leave to ſubjoyn my own : and if what at preſent I offer, may ſeem more probable, or account for this Story with more likelyhood, than what hath hitherto been advanced, I ſhall not think my time altogether miſpent : But if this will not do, I ſhall never trouble my head more about them, nor think my ſelf any ways concerned to write on this Argument again. And I had not done it now, but upon the occaſion of Diſſecting this *Orang-Outang*, or *wild Man*, which being a Native of *Africa*, and brought from *Angola*, tho' firſt taken higher up in the Country, as I was informed by the Relation given me ; and obſerving ſo great a Reſemblance, both in the outward ſhape, and, what ſurprized me more, in the Structure likewiſe of the inward Parts, to a *Man* ; this Thought was eaſily ſuggeſted to me, That very probably this *Animal*, or ſome other ſuch of the ſame *Species*, might give the firſt riſe and occaſion to the Stories of the *Pygmies*. What has been the πρῶτον ψεῦδος, and rendered this Story ſo difficult to be believed, I find hath been the Opinion that has generally

(*s*) *Oppian. lib.* 1. *de Piſcibus.*

obtained :

obtained, that theſe *Pygmies* were really a Race of *little Men*. And tho' they are only *Brutes*, yet being at firſt call'd *wild Men*, no doubt from the Reſemblance they bear to *Men*; there have not been wanting thoſe eſpecially amongſt the Ancients, who have invented a hundred ridiculous Stories concerning them; and have attributed thoſe things to them, were they to be believed in what they ſay, that neceſſarily conclude them real *Men*.

To ſum up therefore what I have already diſcourſed, I think I have proved, that the *Pygmies* were not an *Humane Species* or *Men*. And tho' *Homer*, who firſt mentioned them, calls them ἄνδρες πυγμαίοι, yet we need not underſtand by this Expreſſion any thing more than *Apes*: And tho' his *Geranomachia* hath been look'd upon by moſt only as a Poetical Fiction; yet by aſſigning what might be the true Cauſe of this Quarrel between the *Cranes* and *Pygmies*, and by diveſting it of the many fabulous Relations that the *Indian Hiſtorians*, and others, have loaded it with, I have endeavoured to render it a true, at leaſt a probable Story. I have inſtanced in *Cteſias* and the *Indian Hiſtorians*, as the Authors and Inventors of the many Fables we have had concerning them: Particularly, I have Examined thoſe Relations, where Speech or Language is attributed to them; and ſhewn, that there is no reaſon to believe, that they ever ſpake any Language at all. But theſe *Indian Hiſtorians* having related ſo many extravagant Romances of the *Pygmies*, as to render their whole Hiſtory ſuſpected, nay to be utterly denied, that there were ever any ſuch Creatures as *Pygmies* in *Nature*, both by *Strabo* of old, and moſt of our Learned Men of late, I have endeavoured to aſſert the Truth of their *being*, from a *Text* in *Ariſtotle*; which being ſo poſitive in affirming their Exiſtence, creates a difficulty, that can no ways be got over by ſuch as are of the contrary Opinion. This *Text* I have vindicated from the falſe Interpretations and Gloſſes of ſeveral Great Men, who had their Minds ſo prepoſſeſſed and prejudiced with the Notion of *Men Pygmies*, that they often would quote it, and miſapply it, tho' it contain'd nothing that any ways favoured their Opinion; but the contrary rather, that they were *Brutes*, and not *Men*.

And that the *Pygmies* were really *Brutes*, I think I have plainly proved out of *Herodotus* and *Philoſtratus*, who reckon them amongſt the *wild Beaſts* that breed in thoſe Countries: For tho' by *Herodotus* they are call'd ἄνδρες ἄγριοι, and *Philoſtratus* calls them ἀνθρώπους μέλανας, yet both make them θηρία or *wild Beaſts*. And I might here add what *Pauſanias* (*t*) relates from *Euphemus Car*, who by contrary Winds was driven upon ſome Iſlands, where he tells us, ἐν ᾗ ταύταις οἰκεῖν ἄνδρας ἀγρίους, but when he comes to deſcribe them, tells us that they had no Speech;

(t) *Pauſanias in Atticis*, p. m. 21.

that

that they had Tails on their Rumps; and were very laſcivious toward the Women in the Ship. But of theſe more, when we come to diſcourſe of *Satyrs*.

And we may the leſs wonder to find that they call *Brutes Men*, ſince 'twas common for theſe *Hiſtorians* to give the Title of *Men*, not only to *Brutes*, but they were grown ſo wanton in their Inventions, as to deſcribe ſeveral Nations of *Monſtrous Men*, that had never any Being, but in their own Imagination, as I have inſtanced in ſeveral. I therefore excuſe *Strabo* for denying the *Pygmies*, ſince he could not but be convinced, they could not be ſuch *Men*, as theſe *Hiſtorians* have deſcribed them. And the better to judge of the Reaſons that ſome of the Moderns have given to prove the Being of *Men Pygmies*, I have laid down as *Poſtulata*'s, that hereby we muſt not underſtand *Dwarfs*, nor yet a Nation of *Men*, tho' ſomewhat of a leſſer ſize and ſtature than ordinary; but we muſt obſerve thoſe two Characteriſticks that *Homer* gives of them, that they are *Cubitales*, and fight *Cranes*.

Having premiſed this, I have taken into conſideration *Caſpar Bartholine Senior* his *Opuſculum de Pygmæis*, and *Jo. Talentonius*'s Diſſertation about them; and upon examination do find, that neither the Humane Authorities, nor Divine that they alledge, do any ways prove, as they pretend, the Being of *Men Pygmies*. St. *Auſtin*, who is likewiſe quoted on their ſide, is ſo far from favouring this Opinion, that he doubts whether any ſuch Creatures exiſt, and if they do, concludes them to be *Apes* or *Monkeys*; and cenſures thoſe *Indian Hiſtorians* for impoſing ſuch Beaſts upon us, as diſtinct Races of *Men*. *Julius Cæſar Scaliger*, and *Iſaac Caſaubon*, and *Adrian Spigelius* utterly deny the Being of *Pygmies*, and look upon them as a Figment only of the Ancients, becauſe ſuch little Men as they deſcribe them to be, are no where to be met with in all the World. The Learned *Bochartus*, tho' he eſteems the *Geranomachia* to be a Fable, and ſlights it, yet thinks that what might give the occaſion to the Story of the *Pygmies*, might be the *Nubæ* or *Nobæ*; as *Iſaac Voſſius* conjectures that it was thoſe *Dwarfs* beyond the Fountains of the *Nile*, that *Dapper* calls the *Mimos*, and tells us, they kill *Elephants* for to make a Traffick with their Teeth. But *Job Ludolphus* alters the Scene, and inſtead of *Cranes*, ſubſtitutes his *Condors*, who do not fight the *Pygmies*, but fly away with them, and then devour them.

Now all theſe Conjectures do no ways account for *Homer*'s *Pygmies* and *Cranes*, they are too much forced and ſtrain'd. Truth is always eaſie and plain. In our preſent Caſe therefore I think the *Orang-Outang*, or *wild Man*, may exactly ſupply the place of the *Pygmies*, and without any violence or injury to the Story, ſufficiently account for the whole Hiſtory of the *Pygmies*, but what is moſt apparently fabulous; for what has been the greateſt difficulty to be ſolved or ſatisfied, was their being

Men,

Men; for as *Geſner* remarks (as I have already quoted him) *Sed veterum nullus aliter de Pygmæis ſcripſit, quàm Homunciones eſſe.* And the Moderns too, being byaſſed and miſguided by this Notion, have either wholly denied them, or contented themſelves in offering their Conjectures what might give the firſt riſe to the inventing this Fable. And tho' *Albertus*, as I find him frequently quoted, thought that the *Pygmies* might be only a ſort of *Apes*, and he is placed in the Head of thoſe that eſpouſed this Opinion, yet he ſpoils all, by his way of reaſoning, and by making them ſpeak; which was more than he needed to do.

I cannot ſee therefore any thing that will ſo fairly ſolve this doubt, that will reconcile all, that will ſo eaſily and plainly make out this Story, as by making the *Orang-Outang* to be the *Pygmie* of the Ancients; for 'tis the ſame Name that Antiquity gave them. For *Herodotus*'s ἄνδρες ἄγρωι, what can they be elſe, than *Homines Sylveſtres*, or *wild Men?* as they are now called. And *Homer*'s ἄνδρες πυγμαῖοι, are no more an Humane Kind, or Men, than *Herodotus*'s ἄνδρες ἄγρωι, which he makes to be θηρία, or *wild Beaſts:* And the ἄνδρες μικροὶ or μέλανες (as they are often call'd) were juſt the ſame. Becauſe this ſort of *Apes* had ſo great a reſemblance to Men, more than other *Apes* or *Monkeys*; and they going naturally erect, and being deſigned by Nature to go ſo, (as I have ſhewn in the *Anatomy*) the Ancients had a very plauſible ground for giving them this denomination of ἄνδρες or ἄνθρωποι, but commonly they added an Epithet; as ἄγρωι, μικροὶ, πυγμαῖοι, μέλανες, or ſome ſuch like. Now the Ancient *Greek* and *Indian Hiſtorians*, tho' they might know theſe *Pygmies* to be only *Apes* like *Men*, and not to be real *Men*, yet being ſo extreamly addicted to *Mythology*, or making Fables, and finding this ſo fit a Subject to engraft upon, and invent Stories about, they have not been wanting in furniſhing us with a great many very Romantick ones on this occaſion. And the Moderns being impoſed upon by them, and miſguided by the Name of ἄνδρες or ἄνθρωποι, as if thereby muſt be always underſtood an *Humane Kind*, or *real Men*, they have altogether miſtaken the Truth of the Story, and have either wholly denied it, or rendered it as improbable by their own Conjectures.

This difficulty therefore of their being called *Men*, I think, may fairly enough be accounted for by what I have ſaid. But it may be objected that the *Orang-Outang*, or theſe *wild* or *ſavage Men* are not πυγμαῖοι, or *Triſpithami*, that is, but two Foot and a quarter high, becauſe by ſome Relations that have been given, it appears they have been obſerved to be of a higher ſtature, and as tall as ordinary Men. Now tho' this may be allowed as to theſe *wild Men* that are bred in other places; and probably enough likewiſe, there are ſuch in ſome Parts of the Continent of *Africa*; yet 'tis ſufficient to our buſineſs if there are any there, that will come within our Dimenſions; for our Scene lies in *Africa*; where *Strabo* obſerves, that generally the Beaſts are of a leſs ſize than ordinary; and this

this he thinks might give the riſe to the Story of the *Pygmies*. For, ſaith he (u), Τὰ δὲ βοσκήματα αὐτοῖς ἐστὶ μικρὰ, πρόβατα καὶ αἶγες, καὶ κύνες μικροὶ, τραχεῖς δὲ καὶ μάχιμοι (οἰκοῦντες μικροὶ ὄντες) τάχα δὲ καὶ τοὺς πυγμαίους ἀπὸ τῆς τούτων μικροφυΐας ἐπενόησαν, καὶ ἀνέπλασαν. i.e. *That their Beaſts are ſmall, as their Sheep, Goats and Oxen, and their Dogs are ſmall, but hairy and fierce: and it may be* (ſaith he) *from the* μικροφυΐα *or littleneſs of the ſtature of theſe Animals, they have invented and impoſed on us the* Pygmies. And then adds, *That no body fit to be believed ever ſaw them*; becauſe he fancied, as a great many others have done, that theſe *Pygmies* muſt be *real Men*, and not a ſort of *Brutes*. Now ſince the other *Brutes* in this Country are generally of a leſs ſize than in other Parts, why may not this ſort of *Ape*, the *Orang-Outang*, or *wild Man*, be ſo likewiſe. *Ariſtotle* ſpeaking of the *Pygmies*, ſaith, γένος μικρὸν μὲν καὶ αὐτοὶ, καὶ οἱ ἵπποι· *That both they and the Horſes there are but ſmall.* He does not ſay *their* Horſes, for they were never mounted upon *Horſes*, but only upon *Partridges*, *Goats* and *Rams*. And as the *Horſes*, and other *Beaſts* are naturally leſs in *Africa* than in other Parts, ſo likewiſe may the *Orang-Outang* be. This that I diſſected, which was brought from *Angola* (as I have often mentioned) wanted ſomething of the juſt ſtature of the *Pygmies*; but it was young, and I am therefore uncertain to what tallneſs it might grow, when at full Age: And neither *Tulpius*, nor *Gaſſendus*, nor any that I have hitherto met with, have adjuſted the full ſtature of this *Animal* that is found in thoſe Parts from whence ours was brought: But 'tis moſt certain, that there are ſorts of *Apes* that are much leſs than the *Pygmies* are deſcribed to be. And, as other *Brutes*, ſo the *Ape-kind*, in different Climates, may be of different Dimenſions; and becauſe the other *Brutes* here are generally ſmall, why may not *they* be ſo likewiſe. Or if the difference ſhould be but little, I ſee no great reaſon in this caſe, why we ſhould be over-nice, or ſcrupulous.

As to our *Ape Pygmies* or *Orang-Outang* fighting the *Cranes*, this, I think, may be eaſily enough made out, by what I have already obſerved; for this *wild Man* I diſſected was *Carnivorous*, and it may be *Omnivorous*, at leaſt as much as *Man* is; for it would eat any thing that was brought to the Table. And if it was not their Hunger that drove them to it, their Wantonneſs, it may be, would make them apt enough to rob the *Cranes* Neſts; and if they did ſo, no doubt but the *Cranes* would make noiſe enough about it, and endeavour what they could to beat them off, which a Poet might eaſily make a Fight: Tho' *Homer* only makes uſe of it, as a *Simile*, in comparing the great Shouts of the *Trojans* to the Noiſe of the *Cranes*, and the Silence of the *Greeks* to that of the *Pygmies* when they are going to Engage, which is natural enough, and very juſt, and contains nothing, but what may eaſily be believed; tho'

(u) *Strabo Geograph.* lib. 17. p. m. 565.

upon this account he is commonly expoſed, and derided, as the Inventor of this Fable; and that there was nothing of Truth in it, but that 'twas wholly a Fiction of his own.

Thoſe *Pygmies* that *Paulus Jovius* (w) deſcribes, tho' they dwell at a great diſtance from *Africa*, and he calls them *Men*, yet are ſo like *Apes*, that I cannot think them any thing elſe. I will give you his own words: *Ultra* Lapones (ſaith he) *in Regione inter* Corum & Aquilonem *perpetuâ oppreſſa Caligine* Pygmæos *reperiri, aliqui eximiæ fidei teſtes retulerunt; qui poſtquàm ad ſummum adoleverint, noſtratis Pueri denum annorum Menſuram vix excedunt. Meticuloſum genus hominum, & garritu Sermonem exprimens, adeo ut tam Simiæ propinqui, quàm ſtaturâ ac ſenſibus ab juſtæ Proceritatis homine remoti videantur.* Now there is this Advantage in our *Hypotheſis*, it will take in all the *Pygmies*, in any part of the World, or wherever they are to be met with, without ſuppoſing, as ſome have done, that 'twas the *Cranes* that forced them to quit their Quarters; and upon this account ſeveral Authors have deſcribed them in different places: For unleſs we ſuppoſe the *Cranes* ſo kind to them, as to waft them over, how came we to find them often in Iſlands? But this is more than can be reaſonably expected from ſo great Enemies.

I ſhall conclude by obſerving to you, that this having been the Common Error of the Age, in believing the *Pygmies* to be a ſort of *little Men*, and it having been handed down from ſo great Antiquity, what might contribute farther to the confirming this Miſtake, might be, the Impoſture of the Navigators, who ſailing to theſe Parts where theſe *Apes* are, they have embalmed their Bodies, and brought them home, and then made the People believe that they were the *Men* of thoſe Countries from whence they came. This *M. P. Venetus* aſſures us to have been done; and 'tis not unlikely: For, ſaith he (†), *Abundat quoque Regio ipſa* (*ſc.* Baſman in Java majori) *diverſis Simiis magnis & parvis, hominibus ſimillimis, hos capiunt Venatores & totos depilant, niſi quòd in barba & in loco ſecreto Pilos relinquunt, & occiſos ſpeciebus Aromaticis condiunt, & poſtea deſiccant, venduntque Negociatoribus, qui per diverſas Orbis Partes Corpora illa deferentes, homines perſuadent Tales Homunciones in Maris Inſulis reperiri.* *Joh. Jonſton* (x) relates the ſame thing, but without quoting the Author; and as he is very apt to do, commits a great miſtake, in telling us, *pro Homunculis marinis venditant.*

I ſhall only add, That the Servile Offices that theſe Creatures are obſerved to perform, might formerly, as it does to this very day, impoſe upon Mankind to believe, that they were of the ſame *Species* with them-

(w) *Paul. Jovij de Legatione Muſchovitar.* lib. p. m. 489. (†) *M. Pauli Vereti de Regionibus Orientat.* lib. 3. cap. 15. p. m. 390. (x) *Jo. Jonſten. Hiſt. Nat. de Quadruped.* p. m. 139.

ſelves;

ſelves; but that only out of ſullenneſs or cunning, they think they will not *ſpeak*, for fear of being made Slaves. *Philoſtratus* (*y*) tells us, That the *Indians* make uſe of the *Apes* in gathering the Pepper; and for this Reaſon they do defend and preſerve them from the *Lions*, who are very greedy of preying upon them: And altho' he calls them *Apes*, yet he ſpeaks of them as *Men*, and as if they were the Husbandmen of the *Pepper Trees*, καὶ τὰ δένδρα αἱ πιπερίδες, ὧν γεωργοὶ πίθηκοι. And he calls them the People of *Apes*; οὗ λέγεται πιθήκων οἰκεῖν δῆμος ἐν μυχοῖς τοῦ ὄρους. *Dapper* (*z*) tells us, *That the* Indians *take the* Baris *when young, and make them ſo tame, that they will do almoſt the work of a Slave; for they commonly go erect as Men do. They will beat Rice in a Mortar, carry Water in a Pitcher*, &c. And *Gaſſendus* (*a*) in the Life of *Pieresky*, tells us, *That they will play upon a Pipe or Cittern, or the like Muſick, they will ſweep the Houſe, turn the Spit, beat in a Mortar, and do other Offices in a Family.* And *Acoſta*, as I find him quoted by *Garcilaſſo de la Vega* (*b*) tells us of a *Monkey* he ſaw at the Governour's Houſe at *Cartagena*, 'whom they ſent often to the Tavern for Wine, with Money in one 'hand, and a Bottle in the other; and that when he came to the Ta-'vern, he would not deliver his Money, until he had received his 'Wine. If the Boys met with him by the way, or made a houting 'or noiſe after him, he would ſet down his Bottle, and throw Stones 'at them; and having cleared the way, he would take up his Bottle, 'and haſten home. And tho' he loved Wine exceſſively, yet he would 'not dare to touch it, unleſs his Maſter gave him Licenſe. A great many Inſtances of this Nature might be given that are very ſurpriſing. And in another place tells us, That the Natives think that they can ſpeak, but will not, for fear of being made to work. And *Bontius* (*c*) mentions that the *Javans* had the ſame Opinion concerning the *Orang-Outang*, *Loqui verò eos, eaſque Javani aiunt, ſed non velle, ne ad labores cogerentur.*

(y) *Philoſtratus in vita Apollonij Tyanæi*, lib. 3. cap. 1. p. m. 110, & 111. (z) *Dapper Deſcription de l'Afrique*, p. m. 249. (a) *Gaſſendus in vita Pierskij*, lib. 5. p. m. 169. (b) *Garcilaſſo de la Vega Royal Commentaries* of *Peru*, lib. 8. cap. 18. p. 1333. (c) *Jac. Bontij Hiſt. Nat. & Med.* lib. 5. cap. 32. p. m. 85.

A Philological Eſſay Concerning the CYNOCEPHALI OF THE ANCIENTS.

Of the Cynocephali *of the Ancients.*

THIS not that I think there are any at preſent ſo miſtaken, as to believe the *Cynocephali* to be a Race of *Men*, that I write this Eſſay: 'tis ſo notoriouſly known that they are *Monkeys*, or rather *Baboons*, that 'tis needleſs to go about to prove it, 'tis what even the *Ancients* themſelves have ſufficiently confeſſed. That which induces me to mention them, is to ſhew how fond the *Ancients* were of inventing *Fables*; and *Cteſias*, who hath told us ſuch fine Stories of the *Pygmies*, whom he makes to be *little Men*, tho' indeed they are only a ſort of *Apes*; when he comes to diſcourſe of the *Cynocephali*, which are a ſort of *Baboons*, and far leſs like *Men* than the *Pygmies* are, to perſwade us that theſe likewiſe are a Race of *Men*; he is obliged to exerciſe his Inventive Faculty with more force, to uſe much bolder ſtrokes, and by roundly aſſerting ſo many incredible Things, to amuſe our Imaginations, he hopes at leaſt to give the Reader Entertainment, tho' he miſſes his Deſign of gaining our belief.

I will give you *Cteſias*'s own words, that you may ſee I do not abuſe him,

him, as he hath done Mankind, in moſt of the *Natural Hiſtory* that he hath left us; for as *(a) Photius* informs us, *Cteſias* tells us

Ἐν τοῖς δὴ τοῖς ὄρεσι φησὶν ἀνθρώπους βιοῦν, κυνὸς ἔχοντας κεφαλήν. Ἐσθῆτας δὲ φορεῖν ἐκ τῶν ἀγρίων θηρίων: φωνὴν δὲ διαλέγονται οὐδεμίαν, ἀλλ' ὠρύονται ὥσπερ κύνες· καὶ ὅτι συνιᾶσιν αὐτῶν τὴν φωνήν. Ὀδόντας δὲ μείζους ἔχειν κυνὸς, καὶ τοὺς ὄνυχας ὁμοίως, κυνῶν, μακροτέρους δὲ καὶ στρογγυλοτέρους. Οἰκεῖν δὲ ἐν τοῖς ὄρεσι, μέχρι τοῦ Ἰνδοῦ ποταμοῦ. Μέλανες δέ εἰσι καὶ δίκαιοι πάνυ, ὥσπερ καὶ οἱ ἄλλοι Ἰνδοί, εἰς [καὶ] ὑπερβάλλουσι. Καὶ συνιᾶσι μὲν τὰ παρ' ἐκείνων λεγόμενα, αὐτοὶ δὲ οὐ δύνανται διαλέγεσθαι: ἀλλὰ τῇ ὀργῇ καὶ ταῖς χερσὶ, καὶ τοῖς δακτύλοις σημαίνουσιν, ὥσπερ οἱ κωφοὶ καὶ ἄλαλοι· καλοῦνται δὲ ὑπὸ τῶν Ἰνδῶν καλύστριοι, ὅπερ ἔστιν ἑλληνιστὶ κυνοκέφαλοι. Τὸ δὲ ἐνθένδε ἔστιν, ἕως δώδεκα μυριάδων.

Degere iiſdem hiſce in montibus homines memorat canino capite, qui ferarum pellibus veſtiantur. Sermone hos nullo uti, canum tantùm more latratum edere, atque ita mutuò ſeſe intelligere. Dentes illis eſſe quàm canibus majores, & caninos ſimiliter ungues, ſed longiores, ac rotundiores. Montes incolere ad Indum fluvium uſque, & colore eſſe nigro, inſignéſque juſtitiæ cultores, ceterorum Indorum more, inter quos verſentur. Intelligere quoque quæ ab Indis dicantur, licet ipſi loqui minimè poſſint, ut propterea latratu, manibus, atque digitis ſigna dent, quemadmodum ferè ſurdi ac muti ſolent. Vocari hos ab Indis Calyſtrios, *quod Græci dicerent* κυνοκέφαλος, *id eſt,* Canicipites, [*carnibus coſdem veſci crudis*] *totiúſque gentis capita numerari ad centum & viginti millia.*

And a little afterwards he adds,

Ὅτι οἱ κυνοκέφαλοι οἰκοῦντες ἐν τοῖς ὄρεσιν, οὐκ ἐργάζονται: ἀπὸ θήρας δὲ ζῶσιν. Ὅταν δὲ [δὴ] ἀποκτείνωσιν αὐτὰ, ὀπτῶσι πρὸς τὸν ἥλιον. Τρέφουσι δὲ καὶ πρόβατα πολλὰ, καὶ αἶγας, καὶ ὄϊς. Πίνουσι δὲ γάλα καὶ ὀξύγαλα τῶν προβάτων. Ἐσθίουσι δὲ καὶ τὸν καρπὸν τῆς σιπαχόρης, ἀφ' ἧς τὸ ἠλεκτρον: γλυκὺς γάρ ἐστι· καὶ ξυραίνοντες αὐτὸν, σωρείδας συρράπτουσιν, ὥσπερ οἱ τοῖς ἕλλησι τὰς σταφίδας. Οἱ δὲ κυνοκέφαλοι χειδίαν ποιησάμενοι, καὶ ὑπερθέντες, ἀπάγουσι φόρτον τοῦτον. Καὶ τῆς πορφύρας τὸ ἄνθος καθαρὸν ποιήσαντες, καὶ τὸ ἠλέκτρου ξ' καὶ σ' τάλαντα τὸν ἐνιαυτὸν· καὶ ὅτι

Narrat inſuper hos Cynocephalos in montibus habitantes nullum exercere opificium; ſed de venatione vivere, ferásque quas occiderint ad ſolem torrere. Magnam nihilominus pecoris copiam alere, caprarúmque & ovium: quarum quidem ovium lac atque oxygala pro potu illis ſit. Veſci tamen etiam Sipachoræ fructu; è qua, uti dictum eſt, arbore *ſuccinum emanat. dulcem enim illum eſſe. Hunc item illos fructum arefactum in corbes conſtipare, ad eum modum quo uvas paſſas Græci. Eoſdem illos Cynocephalos ratem quoq; extemporariam conſtruere, qua impoſitum hujus fructus onus, ut & purpuræ (ſed purgato prius ejus flore) itémque electri, ad ducenta & ſexaginta talen-*

(a) *Photij Bibliothec. Cod.* 72. *de Indicis*, p. m. 149, &c.

τὸ

τὸ φοινίκιον βάπτειν τῷ φαρμάκῳ, ἕτερα τοσαῦτα. Καὶ ἠλέκτρου χίλια πάλαντα ἀπάγειν καθ' ἑκάστου τοῦ Ἰνδῶν Βασιλεῖ. Καὶ ἕτερα ἢ καταγωγὰς πωλοῦσι τοῖς Ἰνδοῖς, πρὸς ἄρτους καὶ ἄλφιτα καὶ ξύλινα ἱμάτια. Πωλοῦσι ἢ καὶ ξίφη, οἷς χρῶνται πρὸς τὸ τοῦ θηρίων ἄγειν, καὶ τόξα καὶ ἀκόντια. Πάνυ γὰρ καὶ δεινοί εἰσιν ἀκοντίζειν καὶ τοξεύειν Ἀπολίμποι δ' εἰσὶ, διὰ τὸ οἰκεῖν αὐτοὺς ὄρεα ἄβατα καὶ ὑλώδη. Διδόασι ἢ αὐτοῖς διὰ πέμπτου ἔτους δῶρα ὁ Βασιλεὺς, τοῦ μὲν μυριάδας τόξων καὶ ἀκοντίων τοσαύτας, πελτῶν ἢ δώδεκα καὶ ξίφη ἢ πεντακισμύρια. Τούτοις τοῖς κωφοκεφάλοις οὐκ ἐστὶν οἰκίαι, ἀλλ' ἐν σπηλαίοις διαιτῶνται. Θηρεύουσι ἢ τὰ θηρία, τοξεύοντες καὶ ἀκοντίζοντες, καὶ διώκοντες καταλαμβάνουσι ταχὺ γὰρ τρέχουσι· λέοντα ἢ αἱ γυναῖκες αὐτῶν ἅπαξ τοῦ μηνὸς, ὅταν τὰ καταμήνια αὐτῆς ἔλθῃ· ἄλλοτε δ' οὔ. Οἱ ἢ ἄνδρες οὐ λούονται μὲν, τὰς δὲ χεῖρας ἀπονίζονται. Ἐλαίῳ δὲ χρῶνται τρὶς τοῦ μηνὸς, τοῦ δὲ τὸ γάλακτι θρομένῳ, καὶ ἐκλείβουσι δέρμασι. Τῷ δὲ ἐδωδίμῳ ἔχρηται οὐ δασεῖαν, ἀλλὰ φιλῶν τῶν μαθημάτων. ὡς λεπτοτάτων, καὶ αὐτοὶ καὶ αἱ γυναῖκες αὐτῶν. Οἱ δὲ πλουσιώτατοι αὐτῶν, λίνα φορέουσιν· ὕστοι δὲ εἰσὶν ὀλίγοι. Κλῖναι δὲ αὐτοῖς οὐκ εἰσὶν, ἀλλὰ σισάδας ποιεῦνται. Οὗτος δ' αὐτῶν πλουσιώτατος νομίζεται εἶναι, ᾧ ἂν πλεῖστα πρόβατα ᾖ· ἡ δὲ ἄλλη οὐσία, παραπλησία. Οὐρὰν δὲ ἔχουσι πάντες καὶ ἄνδρες καὶ γυναῖκες, ὥσπερ τῶν ἰχνέων· οἱ πάντες κύνων μείζονα δὲ καὶ δασυτέραν. Καὶ μίσγονται ταῖς γυναιξὶ τετραποδιστὶ, ὥσπερ οἱ κύνες. ἄλλως δὲ μιγῆναι αὐτοῖς, ὄψιν αἰσχρόν. Δίκαιοι δὲ εἰσι, καὶ μαχιμώτατοι πάντων ἀνθρώπων: ζῶσι γὰρ ἔτη ρ' καὶ ο'. ἔνιοι δὲ αὐτῶν καὶ τ'.

ta quotannis avehunt; additis talentis totidem illius Pigmenti, quo infectores puniceum colorem inducunt. Electri præterea mille talenta quotannis ad Indorum regem advehere. Immò & alia plura devehere ad Indos venalia, pro quibus viciſſim panes, farinam, & xylinas veſtes accipiant. Habere quoque enſes venales, quibus ipſi ad venatum utuntur, cum arcubus & jaculis. Peritiſſimos enim eſſe jaculandi atque ſagittandi: & præterea etiam, quod montes habitent altos atque inacceſſos, bello inſuperabiles. Regem ipſis pro munere quinto quoque anno præbere trecenta arcuum, totidémque jaculorum millia; jam peltarum centum viginti, & gladiorum quinquaginta millia. Nullas item apud hos eſſe domos, ſed in antris degere. In venatione jaculis potiſſimum feras, vel ſagittis petere; eaſdemque perſequendo, quòd curſus velocitate præſtent, etiam aſſequi. Horum uxores ſemel duntaxat per menſem, cùm menſtrua patiuntur, lavare; aliàs nunquam. Neque viros unquam omnino lavare, ſed manus tantummodò abluere. Oleo tamen ex lacte confecto ter ſaltem menſibus ſingulis ungi, & pellibus deinde abſtergi. Veſte ad hæc uti, non villoſa, ſed è glabris maceratiſq; pellibus quàm tenuiſſimis, ipſos æquè atque uxores. Exceptis fortè ditiſſimis inter eos, & iis quidem paucis, qui lineos geſtent amictus. Nec item lectorum noviſſe uſum eos, qui extemporaneos ſibi toros exſtruant. Hunc apud eos ditiſſimum haberi, qui plurimum habeat pecoris, ac reliquas opes his propemodum eſſe ſimiles. Caudam inſuper habere omnes, tam viros quàm mulieres, ſupra clunes, caninæ, ſimilem, niſi quòd major ſit, & pilis denſior. Quadrupedes item hos, canum more, cum mulieribus congredi aliúmque congrediendi modum omnem pro turpi habere. Juſtiſſimos eoſdem eſſe, vitæq; reliquos inter homines longiſſimæ. Vivere namq; ad centeſimum uſq; & ſeptuageſimum, nonnulloſq; ad ducentiſſimum quoq; annum. i. e.

'*i. e.* In theſe Mountains (ſaith *Cteſias*) live certain Men, who have 'Heads like Dogs, are cloathed with Skins of wild Beaſts, ſpeak no 'Language, but bark like Dogs, and thereby underſtand one another. 'They have Teeth larger than Dogs; and Nails like Dogs, but longer 'and rounder. They dwell up in the Mountains, as far as the River '*Indus*; they are black and very juſt, as are the other *Indians* with whom 'they are mixt; and they underſtand what is ſaid to them, tho' they 'cannot ſpeak themſelves. But by their *Barking*, and their Hands and 'Fingers, they ſignifie their Minds, as Deaf and Dumb Men do. They 'are called by the Indians, *Calyſtrij*, which in *Greek* is *Cynocephali*. The 'whole Nation is an hundred and twenty Thouſand in number.

'Theſe *Cynocephali* that inhabit the Mountains, do not work, but live 'upon Hunting; and when they kill any wild Beaſt, they roſt it in the 'Sun. They breed a great many Sheep, Goats and Aſſes; and drink the 'Milk and Butter-milk of the Sheep. They eat likewiſe the Fruit of the '*Sipachora* Tree, from whence comes *Ambar*, the Fruit whereof is ſweet, 'which having dried, they put up in Baskets, as the *Greeks* do *Raiſins*. 'Theſe *Cynocephali* having made a Boat, they load it with this Fruit, and 'with *Purpura*, the Flower being firſt picked, and with *Ambar*, to the 'quantity of Two hundred and ſixty Talents, which they every Year 'ſhip off, and as much too of the Drug, with which the Dyers dye 'the Scarlet; and they carry every Year a Thouſand Talents of *Ambar* 'to the *King* of *India*, and they take with them other Commodities, 'which they ſell to the *Indians*; for which they receive Bread, and 'Meal, and Cotton Garments. And the *Indians* ſell them likewiſe Swords, 'which they uſe in taking the wild Beaſts; and Bows and Darts, for they 'are very skilful Archers and Darters. They are invincible, becauſe 'they inhabit very high, and inacceſſible Mountains. Every fifth year, 'the King beſtows upon them Three hundred thouſand Bows, and as 'many Darts: Alſo an Hundred and twenty thouſand Shields, and Fifty 'thouſand Swords. They have no Houſes, but live in Caves. In hunt-'ing the wild Beaſts, they uſe their Bows and Darts, and purſuing 'them, they take them; for they run very ſwift. The Women bathe 'only once a Month, when they have their *Catamenia*, otherwiſe not. 'The Men don't bathe, but only waſh their hands; but they anoint 'themſelves three times in a Month with Oyl made of Milk, and rub 'themſelves with Hides. The Cloaths both of the Men and Women are 'not hairy, but Skins macerated ſmooth, and made very thin. The 'richeſt of them wear Linnen, but thoſe are but few. They have no 'Beds, but lye upon Straw or Leaves. He is eſteemed the richeſt a-'mongſt them, who hath moſt Sheep, or ſuch like Subſtance. They have 'all, both Men and Women, Tails on their Rumps, like Dogs, but lar-'ger and more hairy; and, like Dogs too, they lye with their Women 'on all four, and they think it unbecoming to do otherwiſe. They are

'juſt,

' juſt, and the longeſt lived of any Men, for they live an Hundred and ' ſeventy, and ſome of them Two hundred years.

Had not *Cteſias* made ſuch a Solemn Aſſeveration of the Truth of all that he had wrote, that Apology that *Strabo* (*b*) makes for the *Poets*, might excuſe him, Φαίνεται γὰρ (ſaith *Strabo*) ὡς ὅτι μύθους παρεμπλέκουσιν ἑκόντες· ἐξ ἀγνοίας τῶν ὄντων, ἀλλὰ πλάσεως τῆς ἀδυνάτων, τερατείας καὶ τέρψεως χάριν· i. e. *Statim enim apparet eos fabulas admiſcere, non ob verorum ignorationem, ſed delectationis cauſa, monſtra & alia quæ eſſe non poſſunt, fingentes.* For our *Hiſtorian* had as good a Talent at Fiction as any of the *Poets*. And tho' *Æſchylus*, as the ſame *Strabo* there tells us, firſt invented the Story of the *Cynocephali*, or *Canicipites*, as likewiſe the *Pectoroculati* and the *Unoculi*, as *Heſiod* and *Homer* did that of the *Pygmies*; yet I can't but think he hath as far out-done the Original in what he relates of the *Cynocephali*, as he did in the Account he gives of the *Pygmies*.

Theſe *Cynocephali* by (*c*) *Ælian* are called ἄνθρωποι κυνοπρόσωποι, and he gives this Relation of them, as I find him tranſlated by *Conrad. Geſner*, who is more faithful in rendering him than *Pet. Gillius*, *Ultra Oaſin Ægypti, ſolitudo maxima ad ſeptem dierum iter extenditur. Eam excipit Regio quam* Cynoproſopi *Homines incolunt, in via* Æthiopiam *verſus. Vivunt illi Caprarum & Bubalidum venatu. Aſpectus iis niger, Caput & Dentes Canis. Quod Animal, quum referant, non abſurda eorum* (quamquam Hominum) *hoc in loco exiſtimanda eſt mentio. Nam & Sermonis uſu carent, & acuto quodam ſtridore ſonant. Barbam infra ſupraque os gerunt, Draconum quadam ſimilitudine. Manus eorum validis & acutiſſimis unguibus armantur. Corpus omne hirſutum eſt, hoc etiam inſtar Canum. Sunt autem perniciſſimi, & aquas Regionis norunt; atque eam ob cauſam, difficiles captu.*

Now tho' *Ælian* calls them here *Men*, yet where he deſcribes them before, even out of *Cteſias*, he plainly tells us they are not *Men*, but only *Brutes*, becauſe they cannot ſpeak, but only bark. I will give you (*d*) *Geſner*'s Tranſlation of this Paſſage: *In eodem Indiæ tractu, ubi Canthari* (†) *jam dicti, Cynocephali etiam reperiuntur: quibus à facie & Corporis ſpecie nomen inditum, cætera fere humana habent: & veſtiti pellibus ferarum ingrediuntur. Juſti ſunt, Hominum nemini moleſti aut injurij, non Sermone ſed ululatu ſonant. Indorum tamen linguam intelligunt. Venatione Animalium ferorum vivunt, quæ ut ſunt celerrimi, facile conſecuti interimunt, & fruſtatim diviſa ad ſolem aſſunt. Capras etiam & oves alunt, ut*

(b) *Strabo Geograph.* lib. 1. p. m. 29. (c) *Ælian. Hiſt. de Animal.* lib. 10. cap. 25. p. m. 501. (d) *Ælian. Hiſt. de Animal.* lib. 4. cap. 46. p. m. 239. (†) Theſe *Canthari* are that ſort of *Scarabæus* we call a *Lady-Cow*, and I have formerly given a Figure of, in *Philoſoph. Tranſact.* N. 176. p. 1202. from the Worm or *Chryſalis* of which, come the *Cochineel*, for dying Scarlet, of which there is a good account here in *Ælian* out of *Cteſias*.

ex

ex lacte potu fruantur. Horum inter Animantes rationis expertes non temerè mentionem feci, articulato enim, discretoque & humano Sermone non utuntur.

But 'twas for want of Education, it may be, and by their living wild in the Woods, they loſt their Learning and their Speech; for the *Ægyptians* in the time of the *Ptolomies* took more care of them; and as the ſame *Ælian* relates, they taught them Letters, and to Dance, and to play upon Muſick: Nor were they ungrateful to their Maſters; for they beg'd a great deal of Money, which they carefully put up into a Bag, to reward them for the pains they had taken with them. For thus, ſaith (e) *Ælian*, as *Geſner* tranſlates him; *Animalia Diſciplinæ idonea hæc eſſe percepi. Regnantibus* Ptolomeis *Cynocephalos Ægyptij literas, & ſaltare, & pulſare Citharam docebant. Tum verò unuſquiſpiam Cynocephalorum mercedem, Domini nomine ſic ſcitè tanquam peritus aliquis Mendicus exigebat. Et id quod dabatur in Marſupium, quod ferebat, appenſum, congerebat.*

I could not but take the more notice of this paſſage in *Ælian*, becauſe the *Cynocephali* are always repreſented to be of a fierce and untractable Nature; which ſeems their particular Character: For ſaith *Ariſtotle*, as I have quoted him already (f), Καὶ οἱ κυνοκέφαλοι δὲ τῷ αὐτῷ ἔχουσι μορφῷ τοῖς πιθήκοις, πολὺ μείζονες τ' εἰσὶ, καὶ ἰσχυρότεροι, καὶ τὰ πρόσωπα ἔχοντες κυνοειδέστερα. Ἔτι δὲ ἀγριώτερά τε τὰ ἤθη, καὶ τοὺς ὀδόντας ἔχουσι κυνοειδεστέρους καὶ ἰσχυροτέρους. i. e. *The* Cynocephali *are of the ſame ſhape with* Monkeys, *but they are bigger and ſtronger, and they have a Face more like a Dog's, and are of a fiercer Nature, and have Teeth more like a Dog's, and ſtronger.* And ſo (g) *Pliny*, *Efferacior Cynocephalis Natura ſicut Satyris:* And (h) *Solinus*, *Cynocephali & ipſi ſunt è numero ſimiarum, in Æthiopiæ parte frequentiſſimi: violenti ad ſaltum, feri morſu, nunquam ita manſueti, ut non ſint magis rabidi.* And (i) *Diodorus Siculus* deſcribes them after the ſame manner: Οἱ δ' ὀνομαζόμενοι κυνοκέφαλοι τοῖς μὲν σώμασιν ἀνθρώποις δυσειδέσι παρεμφερεῖς εἰσὶ, ταῖς δὲ φωναῖς μυγμὸς ἀνθρωπίνους περίεν)· ἀγριώταλα δὲ ταῦτα τὰ ζῶα, καὶ παντελῶς ἀπαθάσδλα καθεστῶτα, τῷ ὀπὸ τῆ ὀρρύων προσώπω αὐχηεστέραν ἔχει· ταῖς δὲ δηλείαις ἰδιώταλον συμβαίνει, τὸ τῷ μήτραν εἶσὶς τῶ σώμαλ@ φέρειν ἄπανλα τ' χρόνον. i. e. *Qui Cynocephali (à Canino Capite) dicuntur, Corporis aſpectum Hominum deformium inſtar habent, quorum vocem muſſitatione tantùm exprimunt. Apprimè ferox eſt hoc Animal, nec ullo cìcurationem pacto admittit, & vultum à ſuperciliis auſterioribus præfert. Singulare quiddam fœmellis accidit; quod vulvam perpetuò extra Corpus projectam habent.* And *Agatharcides* in (k) *Photius* gives juſt the ſame deſcription of them: Ὁ δὲ κυνοκέφαλ@ (ſaith he) τὸ μὲν σῶμα ἀνθρώπω δυσειδὲς ἔπε-

(e) *Ælian. Hiſt. de Anim.* lib. 6. cap. 10. p. 331. (f) *Vid. pag.* 3. & 7. of the Anatomy. (h) *Plinij Hiſt. Nat.* lib. 8. cap. 54. p. 243. (h) *Solini Polyhiſtor.* cap. 27. p. m. 39. (i) *Diodori Siculi Bibliotb. Hiſtor.* lib. 3. p. m. 168. (k) *Photij Bibliotb.* Cap. 38. Cod. 250. p. m. 1364.

γράφει. τὸ πρόσωπον δὲ κυνὸς φωνὴν δὲ ἀφίησι μυγμῷ παραπλησίαν· ἄγριον δὲ ὑπερβολῇ καὶ τελείως ἀπιθάσσευτον, καὶ τὴν ὄψιν ἐμφαῖνον ἀπό τε τῶν ὀφρύων καὶ τῶν ὀμμάτων αὐστηράν. Περὶ μὲν τὰ ἄῤῥενα ταῦτα. Τῷ δὲ θήλει πρόσκειται καὶ τὸ τὴν μήτραν ἔξω τοῦ σώματος φορεῖν, καὶ οὕτω διαγίνεσθαι πάντα τὸν βίον. i. e. *In Cynocephalo Hominis Corpus, specie turpis, adumbratur. Canina ei facies, vocem stridori Muris non dissimilem exprimit. Sed immodicè ferum est Animal, nec ullo modo cicuratur: vultumque à superciliis & oculis austerum prodit. Ita Mas comparatus est. Fœmineo generi hoc est proprium, ut uterum extra Corpus gestet, eoque habitu totam exigat vitam.*

Salmasius (1) remarks that *Agatharcides* borrowed this Passage, as he hath some others likewise, from *Diodorus Siculus*. But that these Relations of *Ctesias* that are so extravagant and wild, should be copied from him, by so many and noted Authors too, seems somewhat strange. Yet we find *Ælian*, *Pliny*, *Solinus*, and a great many others have done it; tho' they have added by it little Credit to their Histories, and no doubt much lessened their own Reputation by transcribing the Errors of their Predecessors. In the *History* therefore of *Nature* we must not depend upon the Authority of the Number of those that only transcribe the same thing, without duly examining the Matter themselves: For the Authority here wholly depends on the veracity of the first Relator: And if what *Ctesias* saith is false, tho' never so many say the same thing from him, they must all be in the wrong. Especially in transcribing the Ancients, and believing their Reports, we ought to be very cautious, since 'twas a common Practice amongst them to disguise and conceal the Truths they would deliver, in *Ænigmatical* and *Mythological* Representations. Many times there is something of Truth contained in their Relations, but 'tis under such Vails, that you will not discover it, till you have taken them off. And tho' there are no such *Men*, as *Ctesias*'s *Cynocephali*, and *Pygmies*; yet there are *Apes*, and *Monkeys*, and *Baboons*, that afforded him a ground for his Invention.

Now what sort of *Monkey* these *Cynocephali* were, I shall not at present enquire; that they are of the *Monkey-kind* is evident, because they have Tails: and *Aristotle* tells us, that they are bigger and stronger, and therefore I make them of the *Baboon-kind*. But not having seen any of them my self, I shall refer my Reader to the Authors who have wrote about them. 'Tis sufficient to my present purpose that they are a sort of *Monkeys*, and not *Men*, as formerly represented.

(1) *Salmasij Exercitat. Plinian. Cap.27.p.267.*

A

A Philological Eſſay Concerning the SATYRS OF THE ANCIENTS.

Of the SATYRS of the Ancients.

TULPIUS and *Bontius* indeed think the *Orang-Outang* to be the *Satyr* of the Ancients; but if we enquire into their Hiſtory, and examine what Opinion the Ancients had concerning them, we ſhall find it no leſs involved in *Fables*, than that of the *Pygmies*; and upon this account ſeveral of our Learned Men of late, have wholly denied them, and look upon all the Stories concerning them to be only a Fiction of the *Poets* and *Painters*, and that there were never any ſuch Beings in Nature. The Learned (a) *Caſaubon* is clearly of this Mind, *Quicquid de Satyris legimus* (ſaith he) *ex Poetarum Pictorumque fingendi Licentia Originem ducere. Nihil hujus reverà in Rerum Naturâ exiſtere.* So (b) *Iſaac Voſſius* ſpeaking of the *Ægipanes* tells us, *Sanè neque in forma hujus monſtri conveniunt, ſi tamen monſtris accenſenda ſunt ea, quæ ſunt mera Græculorum Commenta.* And the Learned (c) *Bochartus* ſaith, *Abſit interim ut ex his locis Quiſquam colligat, ullos aut jam exſtare, vel unquam extitiſſe in Rerum Natura Satyros.* However, I do not doubt but to make it plainly appear, that there were

(a) *Caſaubon de Poeſi Satyricâ*, lib. 1. cap. 2. (b) *Is. Voſſii Comment. ad Pompon. Melam.* lib. 1. c. 8. p. m. 45.
(c) *Bocharti Hierozoic. ſeu de Animal. Sacra Scriptura.* part. poſt. lib. 6. cap. 7. p. 829.

ſuch Animals in *Africa* which the Ancients called *Satyrs*. And tho' they ſometimes called them *Men*, and for the moſt part worſhipped them as *Gods*, yet I ſhall ſhew, that they were only a ſort of *Monkeys*, and likewiſe Evince, that the *Orang-Outang* was not this ſort of *Monkey* or *Satyr* of the Ancients.

Having propoſed theſe as the Heads of my enſuing Diſcourſe, it will not be expected of me to give an Account of all that has been ſaid on this Argument. I ſhall rather apply my ſelf to make out what I have here aſſerted. And tho' on this occaſion, it may be, the *Poets* have *Enigmatically* repreſented ſome Nobler Secrets of *Philoſophy*, by what they relate under the *Fables* they have made of theſe *Satyrs*, the *Fauni*, the *Nymphæ*, *Pan*, *Ægipan*, *Sylvanus*, *Silenus*, or any other Name they have given of this ſort of *Animal*; yet I think my ſelf no farther concerned at preſent, than to ſhew what might give the firſt riſe to and occaſion of theſe Inventions: or rather to prove that the *Satyrs* were neither *Men*, nor *Demi-gods*, nor *Dæmons*; but *Monkeys* or *Baboons*, that in *Africa* were worſhipped as the *Gods* of the Country; and being ſo, might give the *Poets* the Subject of the Stories which they have forged about them.

The *Satyrs* therefore are generally repreſented like *Men* in the upper Parts, but with Horns on their Heads; and in their lower Parts or Legs like *Goats*: hence they are called *Capripedes*, or Αἰγίποδες ἄνδρες, as *Herodotus* expreſſes it. And *Pliny* (as I ſhall ſhew) where he deſcribes them as *Brutes*; and ſaith, they are ſometimes *Quadrupeds*, ſometimes *Bipeds*, yet tells us, they are *Humanâ Effigie*. *Diodorus Siculus* (*d*) informs us, that when *Oſiris* went into *Æthiopia*, ἀχθῆναι λέγεται πρὸς αὐτὸν τὸ τῶν Σατύρων γένος, ὃς φασὶν ὅτι τῆς ὀσφύος ἔχουσι κόμας, &c. i. e. *Dum in Æthiopia verſatur* (*Oſiris*) *Gens Satyrorum ei adducitur, quas pilos in lumbis* (*Oſphye*) *habere ferunt. Riſus enim amator erat Oſiris & Muſicæ Choreiſq; gaudebat*, &c. *Satyri igitur quia ad tripudia, & decantationem Carminum, omnemque hilaritatem & luſum apti erant, in partem Militiæ venerunt.* He makes them likewiſe the Companions of *Bacchus*, and for the ſame reaſon (*e*), Τοὺς δὲ Σατύρους παῖς περὶ γέλωτα συνεργάσιις ὑπολαμβάνουσι χορεύσας, παραπλήσιον τῷ Διονύσῳ τὸν εὐδαίμονα καὶ κεχαρισμένον βίον· i. e. *Ita Satyri ludicris & ad riſum compoſitis geſtibus & actionibus, vitam Dionyſo beatam, Gratiiſque delibutam, reddunt.* And they are always repreſented as Jocoſe and Sportful, but Scurrilous and Laſcivious; and wonderful Things they relate of their Revellings by Night, their Dancing, Muſick, and their wanton Frolicks. For thus *Pliny* (*f*) deſcribing the Parts about the Mountain *Atlas* in *Africa*, informs us, *Incolarum neminem interdiu cerni: ſilere omnia, non alio quam ſolitudinum horrore: ſubire tacitam*

(d) *Diodorus Siculus Bibliothec. Hiſt.* lib. 1. p. m. 16. (e) *Diodorus Siculus ibid.* lib. 4. p. m. 213.
(f) *Plinij Hiſt. Nat.* lib. 5. cap. 1. p. m. 523.

Re-

Religionem animos propriùs accedentium, præterque horrorem elati (ſc. Montis) ſuper nubila, atque in viciniam Lunaris circuli. Eundem noctibus micare crebris ignibus, Ægipanum, Satyrorumque *laſcivia impleri, Tibiarum ac Fiſtulæ Cantu, & Cymbalorum Sonitu ſtrepere.* And then adds, *Hæc celebrati Authores prodidere.* And ſo (g) *Pomponius Mela, Ultra hunc ſinum Mons altus (ut Græci vocant)* Θεῶν ὄχημα, *perpetuis ignibus flagrat: ultra montem viret Collis longo tractu, longis littoribus obductus, unde viſuntur patentes magis Campi, quàm ut proſpici poſſint, Panum, Satyrorumque. Hinc opinio ea fidem cepit, quòd cum in his nihil culti ſit, nullæ habitantium Sedes, nulla Veſtigia, ſolitudo in diem Vaſta, & ſilentium Vaſtius, nocte crebri ignes micant, & veluti Caſtra late jacentia oſtenduntur, Crepant Cymbala & Tympana, audiunturque Tibiæ Sonantes majus humanis.* Where we may obſerve that what *Pliny* calls *Ægipanes*, *Mela* calls here *Panes*. And the *Satyrs* being commonly called *Fauni*, I can't but think, that the idle Stories we have about the *Fairies*, muſt come from hence: For they likewiſe have their Revellings, Dancing, and Muſick by Night. And as even to this day, to fright Children, they tell them Stories of *Fairies* and *Hobgoblins*, ſo the Ancients did uſe to call any great ſudden Fear, as we do now, a *Panick Fear*, from this *Pan*. For as (h) *Pauſanias* tells us, Ἐν δὲ τῇ νυκτὶ φόβος σφίσιν ἐκπίπτει Πανικός. Τὰ γὰρ ἀπὸ αἰτίας εὐδήλου δείματα οὐ τότε φασὶ γίνεσθαι· i. e. *Eâ nocte Panicus illos inceſſit terror. Terrores enim nulla ex cauſa Ortos ab eo (ſc.* Pane) *immitti aiunt.* And ſo (i) *Euripides:*

Κρονίᾱ Πανὸς τρομερᾷ μάστιγι φοβῆ.

Saturnij (Senis) *Panis tremendo flagello* (Ictus) *trepidas.*

And ſo (k) *Dionyſius Halicarnaſſeus* ſpeaking of the *Faunus*, ſays, Τούτῳ γὰρ ἀναπλάττουσι τῷ δαίμονι Ῥωμαῖοι τὰ Πανικὰ, καὶ ὅσα φάσματα ἄλλα ἐστὶ ἀλλοίας ἰδέας μορφὰς, εἰς ὄψιν ἀνθρώπων ἔρχονται, δείματα φέρονται· i. e. *Huic enim Romani Panicos terrores adſcribunt, & quæcunque alia Spectra, quæ varias induentia formas in Hominum conſpectum veniunt, & Metum ipſis incutiunt.* And (l) *Ovid:*

——*Faunique bicornes*
Numine contactas attonuere ſuo.

How jolly therefore ſoever and merry the *Satyrs* may be by night amongſt themſelves, with their Dancing and Muſick: yet they have been frightful to Men formerly, as the Stories of the *Fairies* and *Hobgoblins* are (as I ſaid before) to Children now; and indeed, the telling Children Stories of this

(g) *Pomp. Mela de ſitu Orbis*, lib. 3. cap. 9. p. m. 63. (h) *Pauſanias in Phocicis.* (i) *Euripides in Rheſo.* (k) *Dionyſij Halicarnaſſ.* lib. 5. cap. 3. (l) *Ovid in Phædra.*

kind,

kind, is a very miſchievous Cuſtom; for they are thereby impreſſed with ſuch Fears, as perhaps they cannot conquer all their Life time. But the Account that (*m*) *Phurnutus* gives of theſe *Panick Fears*, I think is natural; for he tells us, Ἔστι δὲ τὸ παντικὰς λέγεσθαι παραχὰς τὰς ἀφνιδίους, καὶ ἀλόγους, ὅτου γάρ ποτε καὶ αἱ ἀγέλαι, καὶ τὰ ἀνήμερα πτοεῖται, ψόφου τινὸς ἐξ ὕλης, ἢ τῶν ὑπαύλων καὶ φαραγγωδῶν τόπων ἀκόπτως· i. e. *Nihil prohibet quin etiam Panicos tumultus dicamus, qui ſubito & ſine ratione certa exoriuntur: ſic enim interdum armenta & greges terrentur, dum ſonus quidam ſubitus è Sylva, aut ex Antris aut ex Terræ voraginibus affertur.*

Now *Lucretius* thinks that all this Muſick of Pipes, Flutes, Cymbals and Drums, that is ſaid to be made by the Jollity and Revellings of the *Satyrs*, *Fauni*, *Panes*, &c. in this dreadful Mountain by Night, is meer Romance and Fiction; and that 'tis nothing but the *Ecchoing* of the whiſtling boiſterous Winds amongſt thoſe hideous Rocks: For ſpeaking of *Eccho's*, he tells us (*n*),

Sex etiam, aut ſeptem loca vidi reddere voces
Unam cum jaceres: ita colles collibus ipſis
Verba repulſantes iterabant dicta referre.
Hæc loca Capripedes Satyros, Nymphaſque tenere
Finitimi fingunt, & Faunos eſſe loquuntur;
Quorum noctivago ſtrepitu, Ludoque jocanti
Adfirmant volgo taciturna ſilentia rumpi,
Chordarumque Sonos fieri, dulceiſque querelas,
Tibia quas fundit digitis pulſata canentum:
Et genus Agricolùm late ſentiſcere, cum Pan
Pinea ſemiferi Capitis velamina quaſſans,
Unco ſæpe labro calamos percurrit hianteis,
Fiſtula Silveſtrem ne ceſſet fundere Muſam.
Cætera de genere hoc monſtra, ac Portenta loquuntur,
Ne loca deſerta ab Divis quoque forte putentur
Sola tenere: ideo jactant miracula dictis
Aut aliqua ratione alia ducuntur, ut omne
Humanum Genus eſt avidum nimis auricularum.

Which the Ingenious Mr. *Creech* hath thus rendered:

——— And I my ſelf have known
Some Rocks and Hills return *ſix* words for *one*:
The *dancing* words from Hill to Hill rebound,
They all *receive*, and all *reſtore* the ſound.
The *Vulgar*, and the Neighbours think, and tell,
That there the *Nymphs*, and *Fauns*, and *Satyrs* dwell;

(m) *Phurnutus de Natura Deorum Cap. de Pane*, p. m. 70. (n) *T. Lucretij de Rerum Naturâ*, lib. 4. verſ. 581.

And

And that *their* wanton ſport, *their* loud delight
Breaks thro' the *quiet* ſilence of the Night:
Their *Muſick*'s ſofteſt Ayrs fill all the Plains,
And mighty *Pan* delights the liſtning Swains;
The *Goat-fac'd Pan*, whilſt Flocks ſecurely feed,
With *long-hung lip* he blows his Oaten Reed;
The horn'd, the half-beaſt God, when brisk and gay
With Pine-leaves crown'd, provokes the Swains to play,
Ten thouſand ſuch *Romants* the Vulgar tell,
Perhaps leaſt Men ſhould think the Gods will dwell
In *Towns* alone, and ſcorn their *Plains* and *Cell*
Or ſomewhat; for Man *credulous* and *vain*
Delights to *hear* ſtrange things, delights *to feign.*

Lucretius here attributes the Invention of theſe Fables to the ſuperſtitious Notions Men had of *Deities*, and the Itching Ears Mankind generally hath for hearing Novelties and Wonders; and no doubt, the ſatisfying this Humour put the *Ancients* upon inventing moſt of theſe Stories. But we may take notice that *Lucretius* places together the *Satyrs*, the *Nymphs*, the *Fauni* and *Pan*; and generally I obſerve, where mention is made of them, ſeveral are joyned together: As (*o*) *Ovid*,

Illum Ruricolæ, Sylvarum Numina, Fauni
Et Satyri fratres, & tunc quoque clarus Olympus
Et Nymphæ flerunt.

The *Fauni* therefore and *Satyrs* I find are near akin. And (*p*) *Ovid* in another place ſaith,

Quid non & Satyri Saltatibus apta juventus
Fecere, & Pinu præcincti Cornua Panes.
Silvanuſque ſuis ſemper juvenilior annis.

And elſewhere he tells us (*q*),

Panes & in Venerem Satyrorum prona juventus.

The *Satyrs* therefore and *Fauni* ſeem to be young ones, and the elder, the *Panes* and *Silvani*, according to that of (*r*) *Virgil*,

——*Deos qui novit agreſtes*
Panaque, Silvanumque Senem Nymphaſque Sorores.

And (*s*) *Plutarch* tells us that what the *Greeks* called *Ægipan*, the *Romans* called *Silvanus*. And (*t*) *Pauſanias* expreſly tells us, that when the *Satyrs*

(*o*) *Ovid. Metamorph.* lib. 6. verſ. 392. (*p*) *Ovid. Metamorph.* lib. 14. verſ. 637. (*q*) *Ovid.* l. 1. *Faſtorum.* (*r*) *Virgil. Georg.* l. 2. verſ. 494. (*s*) *Plutarch in Parallelis.* (*t*) *Pauſan. in Attic.* p. m. 21.

grow

grow old, they are called *Sileni*: Τὰς γὰρ ἡλικίας τῶν Σατύρων τοιαύτας ὀνομάζουσι Σειληνούς. And by *Virgil*'s Expreſſion *Nymphaſque Sorores*, 'tis very evident, that the *Nymphs* likewiſe were of this Family, and nearly related. *Ovid* (u) joyns them together.

Sunt mihi Semidei, ſunt Ruſtica Numina Nymphæ,
Faunique, Satyrique, & monticulæ Silvani.

Now what difference there is amongſt all theſe, unleſs as to their *Age* and *Sex*, I will not undertake at preſent to determine. The *Poets* and the *Painters* of old, if we nicely enquire into them, have been pleaſed, as their fancy govern'd them, to make, or not make a diſtinction between them. Thoſe that have a mind to ſatisfie their Curioſity farther in this Matter, may conſult *Salmaſius*, *Bochart*, *Gerard*, and *Iſaac Voſſius*, and ſeveral others, who have largely wrote about them. I am apt to think that *Pan*, *Ægipan*, *Silvanus* and *Silenus*, were all the ſame; as were the *Satyri* and the *Fauni*; only theſe were younger than the former; and the *Nymphs* were the *Females* of the Kind. But 'tis ſufficient to my buſineſs, if I make it appear, notwithſtanding all this, that the *Satyrs* were not *Men*, nor *Demi-Gods*, nor *Dæmons*, but only Brutes of the *Monkey-kind*; which is plain enough even from the Ancients, who have invented ſo many Fables about them.

For (w) *Herodotus* tells us, and he is apt enough oftetimes to be over-credulous, ἐμοὶ μὲν ὁ πρὸ λέγοντες, οἰκέειν τὰ ὄρεα αἰγίποδας ἄνδρας: for they are neither Men, nor have they ſuch Feet. *Satyri de hominibus nihil aliud præferunt quàm figuram*, ſaith (x) *Solinus*. *Satyrus præter Effigiem nihil humani*, ſaith (y) *Mela*. *Pliny* gives us a larger deſcription of them; *Sunt & Satyri* (ſaith (z) he) *ſubſolanis Indorum montibus (Catharcludorum dicitur Regio) perniciosiſſimum Animal: Cùm Quadrupedes tum rectè incedentes, humanâ effigie, propter velocitatem, niſi Senes aut ægri, non capiuntur. Choromandarum Gentem vocat Tauron, Silveſtrem, ſine voce, ſtridoris horrendi, hirtis Corporibus, oculis glaucis, dentibus caninis.* You may here perceive they have ſomething of the ſhape of Men, but can't ſpeak, they are hairy, they go ſometimes upon all four, ſometimes erect, they have Dogs Teeth, they are wild miſchievous Animals. But *Ælian* is a little more expreſs: *Finitimos* Indiæ *montes* (ſaith (a) he) *tranſmittenti, ad intimum latus denſiſſimas convalles videri aiunt, &* Corudam *locum nominari: ubi Beſtiæ Satyrorum ſimilitudinem formamque gerentes, & toto Corpore hirſutæ, verſantur: atque Equina Cauda præditæ dicuntur. Eæ quum non à venatoribus agitantur, in opacis & ſpiſſis Sylvis ſolent ex frondibus (& fructibus) vivere. Quùm autem Venantium ſtrepitum ſentiunt, & Ca-*

(u) *Ovid. Metamorph.* lib. 1. verſ. 192. (w) *Herodot. in Melpomene*, p. m. 229. (x) *Solinus Polyhiſt.* cap. 34. (y) *Pomp. Mela de ſitu Orbis*, lib. 1. cap. 8. p. 11. (z) *Plinij Hiſt. Nat.* lib. 7. cap. 2. (a) *Ælian. Hiſt. Animal.* lib. 16. cap. 21.

num

num latratus exaudiunt, in Montium vertices incredibili celeritate excurrunt: nam per montes iter conficere assuetæ sunt. Contra eos qui se insequuntur pugnant, de summis montibus saxa devolventes, quorum impetu sæpe multi deprehensi pereunt. Itaque difficillimè capiuntur: Et ex iis nonnullæ, sed ægerrimè tandem, aut ægrotantes nimirum, aut gravidæ comprehenduntur. Illæ quidem propter morbum; hæ verò ob gravitatem. Captæ autem ad Prasios deferuntur. *Ælian* here tells us that they have Tails like Horses, therefore they must be of the *Monkey* or *Baboon* kind. And *Pausanias*, who made it his Business to enquire more particularly about them, informs us they have such Tails, but can't speak, but are very Lascivious and Lustful, as they are observed to be to this day. I will give you *Pausanias*'s words; Περὶ δὲ Σατύρων (saith (*b*) he) οἵτινες εἰσὶν, ἑτέρου πλέον ἐθέλων ἐπίστασθαι, πολλοῖς αὐτῶν τούτων εἵνεκα ἐς λόγους ἦλθον. Ἔφη δὲ Εὔφημος Κὰρ ἀνὴρ πλέων ἐς Ἰταλίαν ἁμαρτεῖν ὑπὸ ἀνέμων τοῦ πλοῦ, καὶ ἐς τὴν ἔξω θάλασσαν, ἐς ἣν οὐκέτι πλέουσιν ἐξεννεχθῆναι· Νήσους δὲ εἶναι μὲν ἐρήμους πολλὰς, ἐν δὲ ταύταις οἰκεῖν ἄνδρας ἀγρίους· ἄλλαις δὲ οὐκ ἐθέλειν νήσοις προσίσχειν τοὺς ναύτας, οἷα πρότερόν τε προσχόντας, καὶ τῶν ἐνοίκων οὐκ ἀπείρως ἔχοντας. Βιασθῆναι δ' οὖν καὶ τότε. Ταύτας καλεῖσθαι μὲν ὑπὸ τῶν ναυτῶν Σατυρίδας, εἶναι δὲ τοὺς ἐνοικοῦντας καὶ πυῤῥοὺς, καὶ ἵππων οὐ πολὺ μείους ἔχειν ἐπὶ τοῖς ἰσχίοις οὐράς. Τούτους ὡς ἤσθοντο καταδραμόντας ἐπὶ τὴν ναῦν, φωνὴν μὲν οὐδεμίαν ἱέναι, ταῖς δὲ γυναιξὶν ἐπιχειρεῖν ταῖς ἐν τῇ νηΐ. Τέλος δὲ δείσαντας τοὺς ναύτας, βάρβαρον γυναῖκα ἐκβαλεῖν ἐς τὴν νῆσον. Ἐς ταύτην οὖν ὑβρίζειν τοὺς Σατύρους, οὐ μόνον ᾗ καθέστηκεν, ἀλλὰ ταὶ τὸ πᾶν ὁμοίως σῶμα. Which (*c*) *Conrad. Gesner.* I find hath thus translated; *Cæterum de Satyris, quinam sint, cùm plura quàm alij scire laborem, cum multis ea de re sum collocutus: Dixit autem Euphemus Car, se quùm in Italiam navigaret cursu esse excussum vi ventorum, & ad mare extimum, quod navigari non item soleat portatum. Insulas autem ibi multas esse ac desertas, & viris agrestibus incoli. Ad alias verò aiebat nautas deflectere recusasse, quòd antea quoque eò appulsi, Incolarum Inhumanitatem essent experti. Tempestatis denique violentia eò pervenisse. Insulas eas à Nautis vocari Satyrias. Incolas inesse rubicundos, & caudas imo dorso habere, Equinis non multò minores. Hos, ubi senserant, ad navigium accurrisse, nullamque vocem edidisse, sed mulieribus Navi unà advectis manus injecisse. Nautas verò timore correptos, Barbaram Mulierem in Insulam tandem projecisse. Eam Satyros, non solum qua parte consuetudo permittat, verùm etiam toto corpore libidinosè violâsse, referebat.*

It appears therefore plainly that the *Satyrs* have Tails. But that there might not the least Scruple remain what sort of Animals these *Satyrs* were, I shall produce a Passage out of (*d*) *Philostorgius* which is very express, and comes fully up to our Business: For he tells us, Ἔστι δὲ καὶ τοῦτο (sc. *Satyrus*) πίθηκος, ἐρυθρὸν τὸ πρόσωπον, καὶ γοργὸς τὴν κίνησιν, καὶ οὐρὰν ἔχων. i. e. *That a Satyr is a sort of Ape with a red face, swift of motion, and ha-*

(b) *Pausanias in Atticis*, p. m. 21. (c) *Gesner. de Animal.* p. 865. (d) *Philostorgij Hist. Ecclesiastic.* lib. 3. cap. 11. p. 41.

ving a Tail. Where you may obſerve that *Philoſtorgius* and *Pauſanias* both agree, that they have a red Face, which may be ſome mark, by which to know them again. And (*e*) *Galen* hath given us another, *viz.* that their *Roſtrum* or Chin is longer than an *Apes*, but not ſo long as that of the *Cynocephalus*, as appears in that Paſſage I have already quoted (*f*), viz. *That a* Man *in proportion to his Body hath the ſhorteſt Chin of any* Animal; *next to a* Man, *an* Ape; *then the* Lynx *and* Satyrs; *and after theſe the* Cynocephali. Now none of theſe Marks agree to the *Orang-Outang*; for it had no *Tail*, it had not a *red Face*, and his *Chin* was *ſhorter* than any other ſort of *Apes*. So that *Bontius* was miſtaken in calling it a *Satyr*. And *Tulpius* was too haſty in laying down this Concluſion, *In ſummâ* (ſaith (*g*) he) *vel Nullus eſt in Rerum Naturâ Satyrus: aut ſi quis eſt, erit proculdubio illud Animal, quod in Tabellâ hic à nobis depictum.* Had *Tulpius* a mind to have made his *Orang-Outang* a *Satyr*, he ſhould not have compared him to a Courtier, nor inſtanced in ſuch Niceties as he obſerves, of his drinking, and going to bed: For, *Efferatior Cynocephalis Natura, ſicut Satyris*, ſaith (*h*) *Pliny*. And in another place he tells us, *Satyris præter figuram nihil moris humani* (*i*). But the *Orang-Outang* had very tender Paſſions, and was very gentle and loving. Another very remarkable difference that I find between the *Satyrs* and the *Orang-Outang*, is, that the *Satyrs* have Pouches in their Chops as *Monkeys* have; but the *Orang-Outang*, as I have ſhewn in the Anatomy, had none. *Condit* (ſaith (*k*) *Pliny*) *in Theſauros Maxillarum Cibum Sphingiorum & Satyrorum genus: mox inde ſenſim ad mandendum, manibus expromit: & quod formicis in annum ſolenne eſt, his in dies vel horas.* The *Orang-Outang* therefore cannot be the *Satyrs* of the Ancients, as *Tulpius*, and *Bontius*, and *Dapper* imagined.

By what has been ſaid, I think it fully appears that there were ſuch *Animals* as the Ancients called *Satyrs*; and that they were a ſort of *Monkeys* or *Apes* with Tails: And this Account that I have given of them, will very well make out thoſe Texts in *Iſaiah*; as *Chapter* 13. *verſe* 21. *But wild Beaſts of the Deſart ſhall lye there, and their Houſes ſhall be full of doleful Creatures, and Owls ſhall dwell there, and Satyrs ſhall dance there.* And *Chapter* 34. *verſ.* 14. *The wild Beaſts of the Deſart ſhall alſo meet with the wild Beaſts of the Iſland; and the Satyr ſhall cry to his Fellow; the Schrich-Owl alſo ſhall reſt there, and find for her ſelf a place of reſt.* For ſince the *Text* calls them wild Beaſts, I ſee no reaſon why we ſhould fancy the *Satyrs* here to be *Dæmons*, as the Learned *Bochartus* and others ſeem to do. I agree with *Bochart*, that what is told us in the Life of St. *Paul* the Hermite by St. *Jerome*, and in that of St. *Anthony* by St. *Anaſtaſius* of a *Satyr* meeting St. *Anthony* in the Deſart, and diſcourſing with him, may be

(e) *Galen. Adminiſtr. Anat.* lib. 4. cap. 3. p. m. 94. (f) *Vid. Anat.* of the *Orang-Outang*, pag. 94.
(g) *Nic. Tulpij Obſerv. Med.* lib. 4. cap. 56. p. m. 274. (h) *Pliny Nat. Hiſt.* lib. 8. cap. 54. p. 243.
(i) *Plinj ibid.* lib. 5. cap. 8. p. m. 549. (k) *Plinij Nat. Hiſt.* lib. 10. cap. 72. p. m. 466.

fabulous

fabulous or a Delusion. *Non assentior* (saith *(l) Bochartus*) *narrationi Magni Scriptoris, in qua Satyrus introducitur Antonium in Eremo rogans, ut pro se communem Deum deprecetur, tanquam Salutis in Christo particeps futurus. Non alios servat Christus, quàm quos assumpsit. At non assumpsit Angelos, multò minùs Dæmones aut Satyros qui nusquam sunt, sed semen Abrahæ.* And tho' St. *Jerome*, to confirm this Relation, adds, That in *Constantine*'s time one of these Monsters was seen alive at *Alexandria* in *Ægypt*, and after it's Death, it's Carcass was embalmed and sent to *Antioch* for the Emperor to see it; Yet I shall plainly prove that this *Satyr* was nothing else but that sort of *Monkey* I am now discoursing about.

This Story I find often mentioned; but *(m) Philostorgius* gives us the most particular Account of it, and therefore I shall insert his own words; Καὶ ἄλλαις πολλῶν ζωῶν εἰδέαις τῆς πιθηκείας μορφῆς ἐπιμιγνυμένης· καὶ δῆλον ταῦτα ἐστὶν, πολλῶν εἰς ἡμᾶς κομιζομένων, οἷος δὴ καὶ ὁ Πὰν ἐπικληθεὶς ὑπάρχει, ὅς τὴν κεφαλὴν αἰγοπρόσωπός ἐστι, καὶ αἰγόκερως, καὶ ἐκ λαγόνων τὰ κάτω αἰγοσκελὴς, τὴν δὲ κοιλίαν καὶ τὸ στέρνον καὶ τὰς χεῖρας καθαρὸς πίθηκος, ὃν καὶ ὁ τῶν Ἰνδῶν Βασιλεὺς Κωνσταντίῳ ἀπεστάλκει. Τοῦτο δὲ τὸ ζῶον ἔζη μὲν φερόμενον ἄχρι τινὸς ἔν τινι πλέγματι διὰ τὸ θηριώδες εἰργμένον, ἐπεὶ δὲ ἀπέθανε, ταριχεύσαντες αὐτὸ οἱ κομίζοντες, θεάματος παρασχεῖν ἀσυνήθους εἰκόνα, μέχρι τῆς Κωνσταντίνου διεσώσαντο πόλεως. Καὶ μοὶ δοκοῦσι τὸ ζῶον τοῦτο Ἕλληνες πάλαι ἰδεῖν, καὶ ἐκπλαγέντες τῷ ξένῳ τῆς θέας, Θεὸν σφίσιν νομίσαι, εἰθισμένον αὐτοῖς τὰ παράδοξα θεοποιεῖν. Ὥσπερ καὶ τὸν Σάτυρον. i. e. *This Ape-form is mixt with other* Species *of Animals; and this is plain, several being sent over to us; as that which is called* Pan, *which in its Head had a Goat's face and Goat's horns, from it's Loins downwards Goat's Legs; but in it's Belly, Breasts, and Hands was a pure Ape. Such an one the King of* India *sent to* Constantius. *This Animal lived for some time, and was carried about inclosed in a Cage, being very wild. When it died, those that looked after it, having embalmed it to make a shew of this unusual sight, sent it to* Constantinople. *Now I am apt to believe the ancient* Greeks *had seen this Animal, and being surprised at the strangeness of the sight, fancied it to be a God; it being usual for them to make a God of any thing that they admired or wondered at: as they did the* Satyr.

'Tis evident therefore by this Relation, that the *Satyr* is of the *Ape* or *Monkey-kind:* For πίθηκος here is generical, and includes both. But there being several *Species* of them, they received a denomination according to the resemblance they had to other *Animals*; as in *Philostorgius* are mentioned before, the *Leontopithecus*, the *Arctopithecus*, the *Cynocephalus* and *Aegopithecus*, which last seems to be our *Satyr*, from the resemblance it hath in it's Head and Legs to a *Goat*. That their Legs and Face are like a Goat's, is easie enough to be believed: but the *Horns* that they clap upon his Head, seem to me as an addition of the *Poets*, or the *Painters*, or both. But what gave a foundation to this Invention, possibly may be the large-

(l) *Bochart. Hierozoic. part. poster.* lib. 6. cap. 7. p. 829. (m) *Philostorg. Hist. Ecclesiastic.* lib. 3. cap. 11.

ness of their Ears standing off from their Head, and which are very remarkable. And this *Phurnutus* (*n*) gives as the reason of it. *Horace* (*o*) takes notice of their Ears, but ill describes them in making them sharp pointed, whereas they are round.

——— *& aures*
Capripedum Satyrorum acutas.

But by this Account it likewise appears, that *Pan* was a Name of this sort of *Monkey*; and *Philostorgius*'s Remark at the Conclusion of this Passage, I think is very just: for 'tis certain that this *Animal* was worshipped in *India* as a *Deity*, as a Dog was by the *Ægyptians*; and 'twas Death for any Body to kill one of them: For thus saith (*p*) *Diodorus Siculus*, Τάς τε γὰρ αὐτὰς οἰκίας οἱ πίθηκοι κατῴκουν τοῖς ἀνθρώποις, θεοὶ παρ' αὐτοῖς νομιζόμενοι, καθάπερ παρ' Αἰγυπτίοις οἱ κύνες· ἔκ τε τῶν παρεσκευασμένων ἐν τοῖς ταμείοις τὰ ζῶα τὰς τροφὰς ἐλάμβανον ἀκωλύτως ὁπότε βούλοιτο. Καὶ τὰς προσηγορίας δ' ἐτίθεσαν γονεῖς τοῖς παισὶ κατὰ τὸ πλεῖστον ἀπὸ τῶν πιθήκων, ὥσπερ παρ' ἡμὶν ἀπὸ τῶν θεῶν. Τοῖς δ' ἀποκτείνασι τοῦτο τὸ ζῶον, ὡς ἠσεβηκόσι τὰ μέγιστα, θάνατος ὥριστο πρόστιμον. Διὸ δὴ καὶ παρά τισιν ἐνίσχυσεν ἐν παροιμίας μέρει λεγόμενον ἐπὶ τῶν ἀνατεινομένων, ὅτι πιθήκου αἷμα ποτίσειαν. i.e. *Easdem enim domus Simiæ quas Homines frequentant; & pro Diis habentur apud illos, ut apud Ægyptios Canes; paratos etiam in Cellis penariis cibos, quando libet, nemine prohibente, hæ bestiæ sumunt, nominaque ut plurimùm à Simiis, ut apud nos à Diis, Parentes Liberis suis imponunt. Qui Animal hoc interfecerint, in eos, ut nefariæ Impietatis reos, supplicio capitis animadvertitur. Ideo apud nonnullos Proverbij vicem obtinuit, quod in magnifice se efferentes dicitur; Simiæ Cruorem bibisti.* And in another place (*q*) *Diodorus* tells us, that *Pan* was in the greatest Veneration amongst the *Ægyptians*, and his Statue was in every *Temple*. And (*r*) *Juvenal* remarks,

Effigies Sacri nitet aurea Cercopitheci.

The Superstition of worshipping this *Animal* obtained not only amongst the Ancients, but there are Instances likewise of a later date, and what (*s*) *Johannes Linschoten* relates, is very remarkable. 'How that in 'the Year 1554. the *Portuguese* having taken the Island of *Ceylon*, they proposed to rob a Temple on the top of *Adam*'s *Pike*; but they found nothing there, but a little Cabinet adorned with Gold and Jewels, in which 'was kept the *Tooth* of an *Ape*, which they took away, to the great grief 'of the Kings of that Place; who sent Ambassadors to the *Portuguese*, and 'offered them Seventy thousand Ducats for the *Tooth*; which the *Portuguese* were willing enough to take, but were dislwaded from it by 'their Bishop *Gaspar*, who told them, that it was a Crime, thus to encourage the Idolatry of the *Indians*; whereupon he burnt the *Tooth*, and 'flung the Ashes into the River. *Joh. Euseb. Nierembergius* (*t*) hath the

(n) *Phurnutus de Nat. Deorum. Cap. de Pane.* p. m. 71. (o) *Horace Odarum*, Lib. 2. Ode 19. (p) *Diodor. Sicul. Biblioth. Hist.* l. 20. p. m. 793. (q) *Diodor. Sicul. ibid.* l. 1. p. m. 16. (r) *Juven. Satyr.* 15. v. 4. (s) *J. Linschoten apud Theod. de Bry Indiæ Orient. part.* 2. *cap.* 46. p. m. 111. (t) *J. Eus. Nieremberg. Hist. Nat.* l. 9. *cap.* 46. p. 180.

same

ſame Story, but varies in the Account of ſome Particulars. And *Joh. Petrus Maffeius* (*u*) gives us a Relation of one of their Temples, which for Magnificence, might vie with any at *Rome:* His words are theſe; *Sanè fanum eſt Simiæ dicatum: Cujus duntaxat Pecori in victimarum uſum cuſtodiendo, Porticus miram in longitudinem excurrit, Columnarum Septingentarum è Marmore, tantæ magnitudinis, ut Agrippæ Columnas, quæ in celeberrimo quondam omnium Deorum Templo Romæ viſuntur, ſine dubio adæquent.* Now theſe Animals being worſhipped by the *Indians* as *Gods*, 'tis natural to believe (as *Lucretius* ſuggeſts) that they would invent and relate prodigious things concerning them; and no doubt this gave the occaſion to the *Poets* and *Hiſtorians* of making ſuch fabulous Repreſentations of them. How far the latter might be concerned in the addition of *Horns* to the *Satyrs* Heads, I ſhall not at preſent enquire: I call it an Addition, becauſe there is no Account from any credible Author, that there were ever obſerved any of the *Ape-kind* to have Horns. Poſſibly ſome ancient Statues or Paintings might give ſome light into this matter: for the ancient *Statuaries* and *Painters* were curious in repreſenting them; and *Pliny* recommends, as excellent in this kind, the *Satyr* of *Mylo*, of *Lucippus*, *Antiphalus*, *Protogenes*, *Ariſton*, and *Nicomachus*, as Pieces admired in thoſe days.

Albertus Magnus (*w*) who was happier in gueſſing, than in proving or deſcribing what he meant; tells us indeed, that the *Satyr* (whom he calls *Piloſus*) was of the *Ape-kind*; but he makes ſuch an odd Compoſition of him, that one would take it to be rather a *Chimæra*, than a real Being: You may ſee his words in the Citations.

(u) *Joh. Pet. Maffeij Hiſt. Indic.* lib. 1. p. m. 36. (w) *Albert. Magnus de Animalib.* lib. 22. p. m. 223. *Piloſus eſt Animal Compoſitum ex homine ſuperius, & Capra inferius; ſed Cornua habet in fronte; & eſt de genere Simiarum; ſed multum monſtruoſum; & aliquotiens incedit erectum, & efficitur domitum. Hoc aſſerunt in Diſertis habitare Æthiopiæ; & aliquotiens captum & in Alexandriam deductum, & mortuum ſale infuſum & in Conſtantinopolin delatum.*

Of

Of the SPHINGES *of the Ancients.*

WE come now in the laſt place to diſcourſe of the *Sphinges* of the *Ancients*, where I ſhall not relate all that is ſaid of them; nor concern my ſelf with the *Mythology* or Interpretation of the ſeveral *Fables* that have been invented about them; but I propoſe rather to ſhew, that there were indeed ſuch *Animals* which the *Ancients* call'd *Sphinges*; and that they were not *Men*, but *Brutes*; and that they were of the *Ape* or *Monkey-kind*.

If we conſult the fabulous Deſcriptions that are given of the *Sphinx*, we ſhall find it a very monſtrous Compoſition. *Apollodorus* (a) tells us, ἔπεμψε γὰρ Ἥρα Σφίγγα, ἣ μελεὸς μὲν Ἐχίδνης ἦν, Παλεὸς δὲ, Τυφῶνος, εἶχε δὲ πρόσωπον μὲν γυναικὸς σὺν δὲ καὶ βᾶσιν καὶ ὄρνεων λέοντος, καὶ πτέρυγας ὄρνιθος. *That* Sphinx *was the daughter of* Echidna *and* Typho, *ſhe had the face of a Woman, the Breaſt, Feet, and Tail of a Lion, and the Wings of a Bird.* And (b) *Auſonius*,

Terruit Aoniam, Volucris, Leo, Virgo triformis
Sphinx, volucris pennis, pedibus fera, fronte Puella.

But as their Fanſies govern'd them, ſo they made their deſcription. *Clearchus* (as I find him quoted in (c) *Natalis Comes*) has out-done them all; *At* Clearchus (ſaith he) *Caput & Manus Puellæ, Corpus Canis, vocem Hominis, Caudam Draconis, Leonis ungues, Alas Avis, illam habuiſſe ſcripſit.* *Palæphatus* (d) is ſomewhat different in his Account, where he tells us, Περὶ τῆς Καδμείας Σφιγγὸς λέγουσιν ὡς θηρίον ἐγένετο, σῶμα μὲν ἔχον ὡς κυνὸς, κεφαλὴν δὲ, καὶ πρόσωπον κόρης, πτέρυγας ὄρνιθος, φωνὴν δὲ ἄνθρώπου· i. e. *They ſay that the* Cadmean Sphynx *was a wild Beaſt, having the Body of a Dog, the Head and Face of a Virgin, the Wings of a Bird, and the Voice of a Man.* But for the moſt part they make the *Sphinx Biformis* with a Maiden's Face and Lion's Feet; as the *Scholiaſt* upon (e) *Euripides* gives it, πρόσωπον παρθένου. σὺν δὲ καὶ πόδας λέοντος. So the *Scholiaſt* upon (f) *Ariſtophanes*, αἱ δὲ Σφίγγες πόδας λεοντώδεις ἦσαν· And *Euripides* himſelf, as he is quoted by (g) *Ælian*, makes her to have the Tail and Feet of a Lion, in that Verſe,

Οὐρὰν δ' ἀναιλῶσ' ὑπὸ λεοντόπουν βάσιν·
Caudam remulcens ad Leoninos pedes.

Where we may obſerve that *Ælian* tells us here that the *Ægyptian Statuaries*, and the *Theban Fables*, made the *Sphinx* to be only *Biformis*: *Biformem nobis conantur repreſentare, ipſam ex Corpore Virginis & Leonis cum gravitate compoſitam architectantes*, as *Geſner* there tranſlates him: But the *Greeks* repreſented the *Sphynx* with wings; for as (h) *Ælian* in another place tells

(a) *Apollodori Bibliothec.* l. 3. c. 5. § 8. p. m. 170. (b) *Auſonius in Grypho Ternario.* (c) *Natalis Comes Mythol.* l. 9. c. 18. (d) *Palephatus de incredibilibus Hiſtoriis Cap. de Sphinge.* p. m. 14. (e) *Eurip. in Phœniſſ.* (f) *Ariſtophan. in Ranis.* (g) *Ælian. de Animal.* l. 12. c. 7. (h) *Ælian. de Animal.* l. 12. cap. 38.

us,

us, *Sphingem quicunque vel Picturæ vel Plasticæ operam dant, fingere alatam solent.*

But our chief Business is to enquire, how *Nature* hath formed them; and not how the *Poets*, *Painters*, or *Statuaries* have, according to the Luxuriancy of their Fancie, feigned or figured them; to shew what they really are in themselves, and not what *Hieroglyphically* the Ancients might intend or understand by them; and we shall find, that they are only a sort of *Ape* or *Monkey*, that is bred in *Æthiopia* and amongst the *Troglodytes*, of a comely Face, with long Breasts, thence up to their Neck not so hairy as on the rest of their Body; and are of a mild and gentle Nature. For thus (*i*) *Pliny*, *Lyncas vulgo frequentes, & Sphinges, fusco Pilo, mammis in Pectore geminis Æthiopia generat.* And so (*k*) *Solinus*, *Inter Simias habentur & Sphinges, villosæ comis* (*Salmasius* reads it *villosæ omnes*) *mammis prominulis ac profundis, dociles ad feritatis oblitionem.* *Ælian* (*l*) places them amongst the wild Beasts of *India*, where he tells us, *Naturali quodam Ingenio & Prudentia valent etiam apud nos Animalia, non totidem tamen, quot sunt in India: illic enim hujusmodi sunt, Elephantus, Psittacus, Sphinges & nuncupati Satyri, & Indica Formica.* And *Artemidorus* in (*m*) *Strabo* tells us, that the *Sphinges*, *Cynocephali* and *Cepi* are bred amongst the *Troglodytes*. *Agatharchides* (*n*) confirms the same, and gives us this Account of them; Αἱ σφίγγες καὶ οἱ Κυνοκέφαλοι καὶ Κῆποι παραπέμπονται εἰς τὴν Ἀλεξανδρείαν ἀπὸ τῆς Τρωγλοδυτικῆς, καὶ τῆς Αἰθιοπίας· εἰσὶ δὲ αἱ μὲν Σφίγγες ταῖς γεγραμμέναις παρόμοιαι. Πλὴν ὅτι πᾶσαι δασεῖαι, καὶ ταῖς ψυχαῖς ἥμεροι καὶ πρᾶοι. Καὶ πανουργίας κοινωνοῦσι πλείστης, διδασκαλίας τε μεταδιδόασιν ὅτι ποσὸν ἄπτονται, ὥστε τὴν εὐμηχανίαν ἐν πᾶσι θαυμάζειν. i. e. *The* Sphinges, Cynocephali *and* Cepi *are sent to* Alexandria *from the Country of the* Troglodytes *and* Æthiopia. *The* Sphinges *are like to what they are painted, only they are all hairy, and mild and gentle in their Nature: they have a great deal of Cunning, and a Method of Learning what they attain to, that one would wonder at their aptness to any thing.* *Diodorus Siculus* (*o*) gives us much the same Relation, and 'tis likely *Agatharchides* borrowed his from him: for he tells us, Αἱ δὲ Σφίγγες γίγνονται μὲν περί τε τὴν Τρωγλοδυτικὴν, καὶ τὴν Αἰθιοπίαν, ταῖς δὲ μορφαῖς ὑπάρχουσιν οὐκ ἀνόμοιοι ταῖς γεγραμμέναις, μόναι δὲ ταῖς δασύτησι διαλλάττουσι. Τὰς δὲ ψυχὰς ἡμέρους ἔχουσαι καὶ πανούργους, ὅτι πλεῖστον καὶ διδασκαλίαν μεταδιδόασιν ἐπιδέχονται. i. e. *Sphinges circa Troglodyticam & Æthiopiam existunt, formâ his non absimiles, quæ Arte Pictorum exhibentur, nisi quòd hirsutia tantummodò differunt. Placidi illis sunt Animi, & versuti, artisque quæ compendio tradi solet, admodum capaces.* But *Philostorgius* (*p*) is so particular in his Description, and he is the more to be credited, because he declares he had seen them himself, that I think I need

(i) *Plinij Hist. Nat.* lib. 8. cap. 21. p. m. 168. (k) *Solinus Polyhist.* cap. 27. p. m. 39. (l) *Ælian. de Animal.* lib. 16. cap. 15. (m) *Strabo Geograph.* lib. 16. p. 533. (n) *Agatharchides apud Photij Biblioth.* p. m. 1362. cap. 38. (o) *Diodorus Siculus Biblioth.* lib. 3. p. m. 167. (p) *Philostorgius Hist. Ecclesiast.* l. 3. c. 11. p. 41.

no

no more Authorities to prove what I have here laid down, that these *Sphinges* were only a sort of *Ape* or *Monkey*. I will therefore give you his own words, which are these; Καὶ μὲν ἡ Σφίγξ γένος ἐστὶ πιθήκων (αὐτὸς γὰρ θεασάμενος γράφω) ἧς τὸ μὲν ἄλλο σῶμα λάσιόν ἐστιν, ὡς τοῖς ἄλλοις πιθήκοις· τὸ δὲ στέρνον ἄχρι γε αὐτοῦ τοῦ τραχήλου ἐψίλωται, μάζους δὲ γυναικὸς ἔχει. Ἐρυθροῦ τινὸς βραχέος κεγχροειδοῦς ἐπαναστήματος ἅπαν ἐν κύκλῳ τὸ γεγυμνωμένον τοῦ σώματος περιθέοντος, καὶ εἰς πολλήν τινα εὐπρέπειαν ἀνθρωποφανεῖ ὄντι τῷ ἐν μέσῳ χρώματι συναρπαζομένου. Τὸ δὲ πρόσωπον ἐνεστρογγύλωται μᾶλλον, καὶ εἰς γυναικίαν ἕλκει μορφήν. Ἡ τὲ φωνὴ ἐπιεικὼς ἀνθρωπείᾳ, πλὴν ὅσον οὐκ εἰς ἄρθρα διαιρουμένη, ἀλλά τινι ταχέως. καὶ οὖν μετά τινος ὀργῆς τε καὶ ἀχθηδόνος ἄσημα ἐπιφθεγγομένης προσεοικῆα βαρυτέρα τε μᾶλλον ἐστὶν ὀξυνομένα· ἄγριόν τέ ἐστι δεινῶς τὸ θηρίον, καὶ πανουργότατον, καὶ οὐδὲ ῥᾳδίως τιθασευόμενον. i. e. *A* Sphinx *is a sort of Ape (I shall write what I saw my self) all the rest of whose Body is hairy like other Apes. But it's* Sternum *or Breast is smooth without hair up to the Throat. It has* Mammæ *or Breasts like a Woman; little reddish Pimples like Millet Seeds, running round that part of the Body that is bare; very prettily suiting with the Flesh colour in the middle. It's Face is roundish, and resembles a Woman's. It's Voice is very much like the Humane, only it is not articulate, but præcipitate; and like one that speaks unintelligibly thro' Anger and Indignation. When 'tis incensed, it's Voice is deeper. This* Animal *is very wild, and crafty, and not easily tamed.* And *Pierius*, as I find him quoted by (q) *Philip Camerarius*, gives us much the same description of one he saw at *Verona*. *Harum ego unam* (saith he) *Veronæ quum essem vidi; Mammis illi & Glabris & Candidis, à Pectore propendentibus. Circumducebat eam circulator quidam Gallus, ex ignotis antea Insulis recens advectam.* And a little after adds, *Ipsa verò Sphinx toto erat pectore glabello, facie & auribus humanis proprioribus, dorso hispido supra modum, fusco & oblongo Pilo, eoque densissimo.*

What has been said, I think fully makes out, that the *Sphinx* is not a meer Figment of the *Poets*, but an *Animal* bred in *Africa*, of the *Ape* or *Monkey-kind*. 'Tis different from our *Orang-Outang* in the colour of it's Hair; in the roundness and comeliness of it's Face; in it's Breasts, being pendulous and long; and the red Pimples it hath on the naked part of it's Body. *Pliny* tells us (as I have elsewhere remarked) that the *Sphinges* have Pouches in their Chops as *Satyrs* and *Monkeys* have; and the *Poets* describing them with a Lion's Tail, make me apt to think, that they are of the *Monkey-kind*.

(q) *Phil. Camerarij Operæ subcisivæ sive Meditat. Hist. Cent.* 1. *Cap.* 71. p. m. 325.

FINIS.

17° *Die Maij*, 1699.

Imprimatur Liber cui Titulus, *Orang-Outang, ſive Homo Sylveſtris*, &c. Authore *Edvardo Tyſon* M. D. R. S. S.

John Hoskins *V. P. R. S.*

Orang-Outang, sive Homo Sylvestris:

OR, THE

ANATOMY

OF A

PYGMIE

Compared with that of a

Monkey, an *Ape*, and a *Man*.

To which is added, A

PHILOLOGICAL ESSAY

Concerning the

Pygmies, the *Cynocephali*, the *Satyrs*, and *Sphinges* of the ANCIENTS.

Wherein it will appear that they are all either *APES* or *MONKEYS*, and not *MEN*, as formerly pretended.

By *EDWARD TYSON* M. D.
Fellow of the Colledge of Physicians, and the Royal Society: Physician to the Hospital of *Bethlem*, and Reader of Anatomy at *Chirurgeons-Hall*.

LONDON:
Printed for *Thomas Bennet* at the *Half-Moon* in St. *Paul's* Church-yard; and *Daniel Brown* at the *Black Swan* and *Bible* without *Temple-Bar* and are to be had of Mr. *Hunt* at the Repository in *Gresham-Colledge*. M DC XCIX.

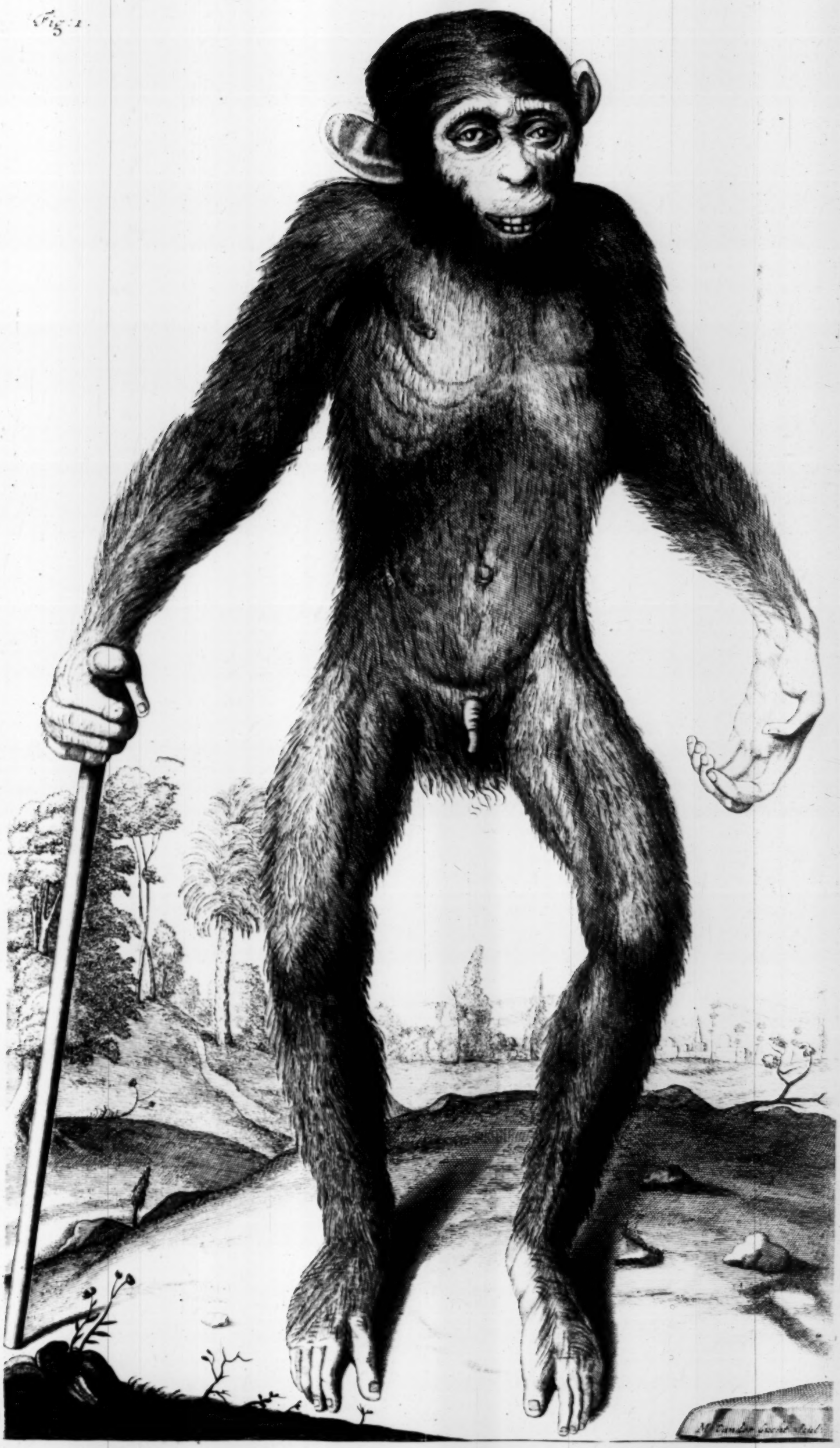
48. Theſe *Muſcles*, *viz.* The *Obliquus Inferior Capitis*, the *Pyriformis* and *Biceps Femoris*, were like the *Humane*; whereas the ſame in *Apes* and *Monkeys* are different. And Note, That all the other *Muſcles* that are not otherwiſe ſpecified in the following *Catalogue*, were like the *Humane* alſo; but whether all the ſame *Muſcles* in *Apes* and *Monkeys* reſemble the *Humane*, could not be determined, for want of a Subject to compare them with, or Obſervations made by others.

The Orang-Outang *or* Pygmie *differ'd from a* Man, *and reſembled more the* Ape *and* Monkey-kind.

1. IN the littleneſs of it's Stature.
2. In the flatneſs of the *Noſe*, and the ſlit in the *Alæ Narium*.
3. In having a riſing Ridge of the *Cranium* under the *Eye-brows*.
4. In being more hairy behind, than before.
5. In having the *Thumb* ſo little, tho' larger than in the *Ape-kind*.
6. In having the *Palm* of the *Hand* longer and narrower.
7. In the length of the *Toes*.
8. In having the *Great Toe* ſet at a diſtance from the other, like a *Thumb*; and being *Quadrumanus*, like the *Ape-kind*.
9. In having the *Shoulder* and *Thigh* ſhorter.
10. In having the *Arms* longer.
11. In having no pendulous *Scrotum*.
12. In the largeneſs of the *Omentum*.
13. The *Gall-Bladder* long and ſlender.
14. The *Kidneys* rounder than in *Men*; and the *Tubuli Urinarij* different.
15. The *Bladder* of *Urine* longer.
16. In having no *Frænum* to the *Præputium*.
17. In having the *Bony Orbit* of the *Eye* ſo much protruded inwards, towards the Brain.
18. It had not thoſe two Cavities under the *Sella Turcica*, as in *Man*.
19. The *Proceſſus Maſtoides* and *Styloides* very ſmall, almoſt wanting.
20. The *Bones* of the *Noſe* flat.
21. In the Number of the *Teeth*, it reſembled the *Ape-kind*.
22. The *Vertebræ* of the *Neck* ſhort as in the *Ape-kind*, and flat before, not round; and their *Spines*, not *biſide*, as in *Man*.
23. In the firſt *Vertebra* of the *Neck* there was no *Spine*.
24. In an *Ape* the Tenth *Vertebra* of the *Back*; in a *Man* the Twelfth; in the *Pygmie* the Thirteenth *Vertebra*, *infra ſuprave ſuſcipitur*.

25. The

Fig. 1.



not round ; and their *Spines*, not *bifide*, as in *Man*.

23. In the first *Vertebra* of the *Neck* there was no *Spine*.

24. In an *Ape* the Tenth *Vertebra* of the *Back*; in a *Man* the Twelfth; in the *Pygmie* the Thirteenth *Vertebra*, *infra suprave suscipitur*.

25. The

25. The *Os Sacrum* altogether like the *Ape-kind*, only in the number of the *Vertebræ*.

26. In having Thirteen *Ribs* on a ſide: a *Man* has but Twelve.

27. The *Bone* of the *Thumb* but ſmall.

28. The *Os Ilium* perfectly like the *Ape-kind*; being longer, narrower, and not ſo Concave as in *Man*.

29. The *Bones* of the *Toes* in their length, and the *Great Toe* in it's Structure imitated the *Ape-kind*.

30. Theſe *Muſcles* were wanting in the *Pygmie*, which are always found in *Men*; viz. *Occipitales*, *Frontales*, *Dilatatores Alarum Naſi*, ſeu *Elevatores Labij Superioris*, *Interſpinales Colli*, *Glutæi minimi*, *Extenſor Digitorum Pedis brevis*, and *Tranſverſalis Pedis*.

31. Theſe *Muſcles* did not appear in the *Pygmie*, and are ſometimes wanting too in *Humane Bodies*; viz. *Pyramidales*; *Caro muſculoſa Quadrata*; the long Tendon and fleſhy Belly of the *Palmaris*; *Attollens Auriculam*; and *Retrahens Auriculam*.

32. The *Elevatores Clavicularum* are in the *Pygmie* and the *Ape-kind*, and not in *Man*.

33. Theſe *Muſcles* reſembled thoſe in *Apes* and *Monkeys*, and differ'd from the *Humane*, viz. *Longus Colli*, *Pectoralis*, *Latiſſimus Dorſi*, *Glutæus maximus & medius*, *Pſoas magnus & parvus*, *Iliacus internus*, and the *Gaſterocnemius internus*.

34. Theſe *Muſcles* differ'd likewiſe from the *Humane*, viz. the *Deltoides*; the *Pronator Radij teres*; the *Extenſor Pollicis brevis*.

The Explanation of the Figures.

Figure the Firſt

REpreſents the Fore-parts of the *Orang-Outang* or *Pygmie*, in an Erect Poſture: Where you may obſerve the largeneſs of the *Head*; and broadneſs of the *Forehead*; the jutting out of the *Eye-brows*; the *Eyes* ſomewhat ſunk; the *Noſe* flat; the *Face* without hair and wrinkled; the *Teeth* like the *Humane*; the *Chin* ſhort; the *Ears* ſtanding off from the Head; the *Head* hairy; the *Shoulders* ſpread and large; the *Arms* and *Palms* of the *Hands* long; the *Nails* like thoſe in a *Man*; the *Hair* of the *Shoulder* inclining downwards, and that on the *Arms*, upwards; the *Fingers* large; the *Thumb* little; the *Breaſt* full cheſted and ſpread; the *Mammæ* or *Teats* placed as in *Man*; the *Belly* flat; the *Navil* as in *Man*; the *Penis* half-way covered with the *Prepuce*, which had no *Frænum*; no pendulous *Scrotum* here; the *Thighs* a little divaricated; the

Legs

Legs long and with *Calves*; the *Foot* like a *Hand*, having long *Toes*, and the *Great Toe* placed at a diſtance from the others, like a *Thumb*; the *Feet*, *Hands*, *Face*, *Ears*, and *Penis* without *Hair*; and all the Fore-parts of the Body rather leſs hairy than here repreſented; and the *Head* is too much ſhrunk down between the Shoulders.

The Second Figure

REpreſents the Hinder Parts of the *Pygmie* in an Erect Poſture likewiſe; where may be obſerved the *Globous Figure* of the *Head*; the ſtraitneſs of the *Back*; and that 'tis more hairy behind, than before; the *Fingers* of the *right Hand* are repreſented bending, to ſhew the *Action*, when it goes on all four; for then it places only the *Knuckles*, not the *Palms* of the *Hands* to the Ground. The *Sole* of the *left Foot*, by reaſon of the length of the *Toes*, and the ſetting on of the *Great Toe*, looks like the *Palm* of the *Hand*: but the *right*, having ſo long a *Heel*, and its *Toes* being hid, appears rather like a *Foot*, and upon occaſion performs the Office of both, either of a *Foot* or *Hand*. A little above the *Anus*, there is a black Spot, which repreſents a ſmall Protuberance of the *Os Coccygis*.

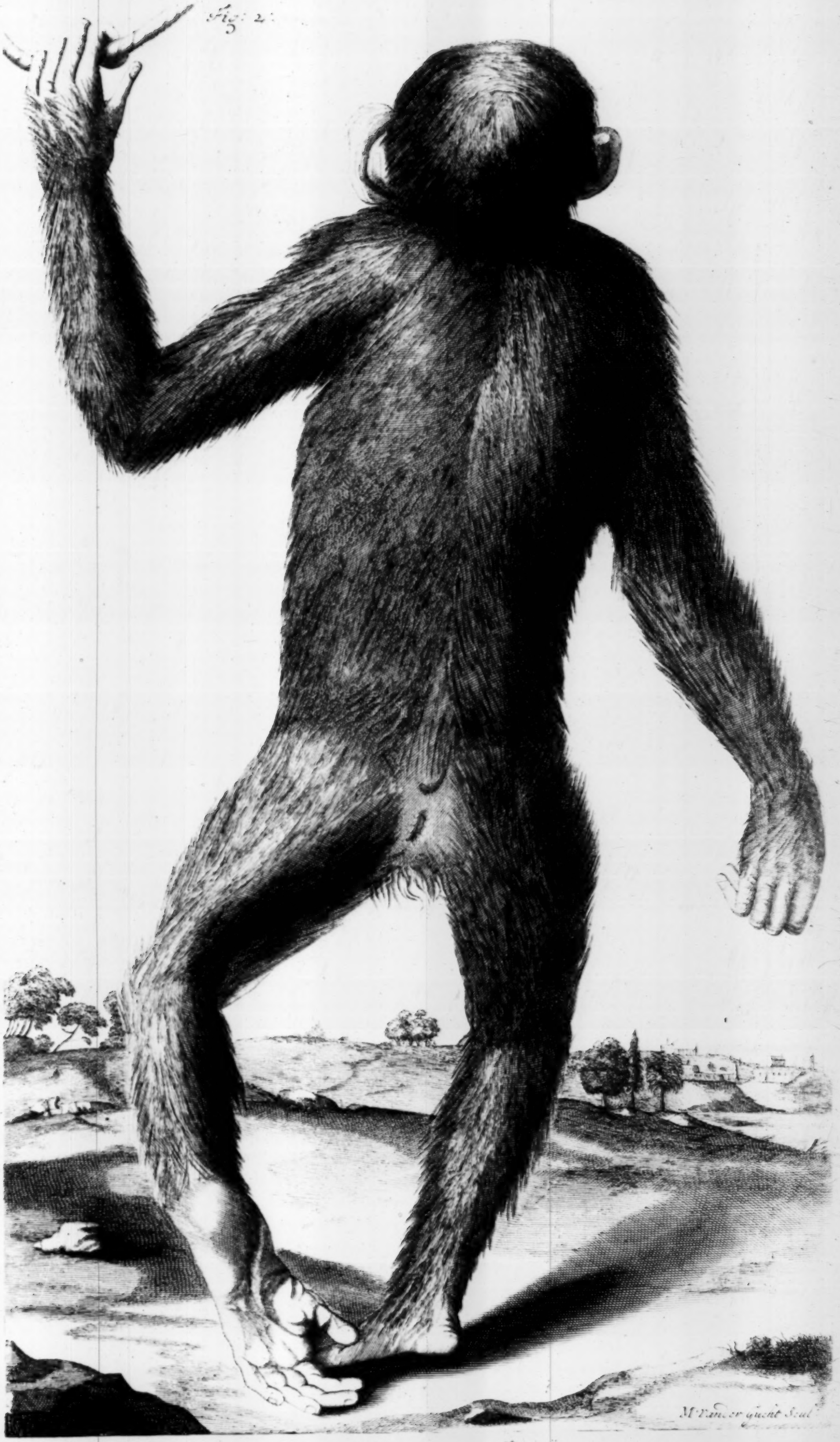
The Third Figure

REpreſents the *Muſcles* which appear on the Fore-part of the *Body*.

A. Part of the Coronary Suture.
B. The Diviſion of the *Cranium* made by the Saw.
c. The *Meatus Auditorius*.
d. Part of the *Os Jugale*, or *Zygomaticum*.
e. The *Parotid Gland*. * The *Salival Duct*.
f. The *Inferior Maxillary Gland*.
g. g. The *Claviculæ*.
h. Part of the *Spina Scapulæ*, as joyned to the *Clavicle*.
j. The Nerves, and Blood Veſſels which paſs to the Arm.
k. The Trunk of the *Nerve* in the left Arm, that goes to the Fingers.
l. A large Trunk of the *Arterie*, and a *Nerve* in the *Cubit*, as in *Humane* Bodies.
m. m. The Internal Protuberances of the *Os Humeri*.
n. The *Radius* of the left Arm made bare.
o. The *Umbilicus*, or *Navil*.
p. The *Linea Alba*.
q. q. The Tendons of the Oblique Muſcles, call'd *Linea Semilunaris*.

r. r. The

Fig: 2.



mane Bodies.

m. m. The Internal Protuberances of the *Os Humeri.*

n. The *Radius* of the left Arm made bare.

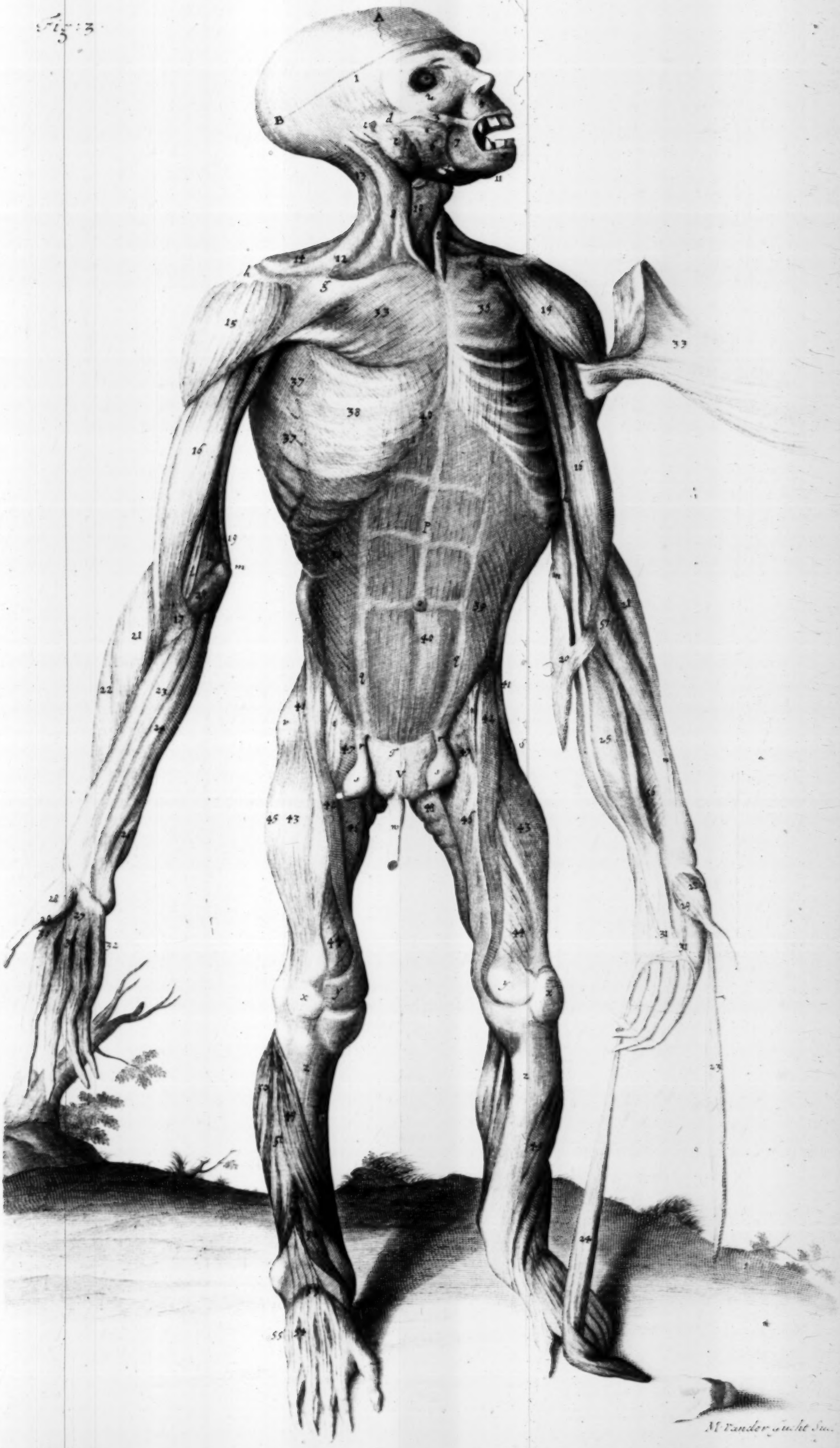
o. The *Umbilicus*, or *Navil.*

p. The *Linea Alba.*

q. q. The Tendons of the Oblique Muſcles, call'd *Linea Semilunaris.*

r. r. The

Fig. 3



mane Bodies.

m. m. The Internal Protuberances of the *Os Humeri.*

n. The *Radius* of the left Arm made bare.

o. The *Umbilicus*, or *Navil.*

p. The *Linea Alba.*

q. q. The Tendons of the Oblique Muſcles, call'd *Linea Semilunaris.*

r. r. The

r. r. The *Tunica Vaginalis*, containing the *Vasa Præparantia*, &c.
s. s. The *Testes* or *Stones.*
t. The Blood Vessels of the Thigh, as they pass under the *Inguinal Glands.*
T. The *Os pubis.*
V. The *Ligamentum suspensorium Penis.*
u. The *Great Trochanter.*
w. The *Penis.*
x. x. The two *Patellæ.*
y. y. The internal and lower *Appendix* of the *Os Femoris.*
z. z. The *Tibia.*
N° 1. The *Musculus Temporalis.*
2. The *Orbicularis Palpebrarum.*
3. *Zygomaticus, seu distortor oris.*
4. *Elevator Labij superioris proprius.*
5. *Elevator Labij inferioris proprius.*
6. *Masseter.*
7. *Buccinator.*
8. 8. *Mastoideus.*
9. *Sternohyoideus.*
X. Part of the *Corocohyoideus.*
11. Part of the *Digastricus*, and it's Insertion into the *Chin.*
12. *Elevator Claviculæ*, which Muscle is not in Man, but in the *Pygmie* and *Apes.*
13. Part of the *Complexus Capitis.*
14. Part of the *Cucularis.*
15. 15. *Deltoides.*
15. 16. The *Biceps.*
17. The thin Tendinous Expansion of the *Biceps*, which involves the *Muscles* of the *Cubit*, as in Man.
18. Part of the *Brachæus internus.*
19. The Tendinous Elongation of the *Latissimus Dorsi*, which is found in the *Pygmie*, and in *Apes* and *Monkeys*; and not in *Man*; near it's Insertion into the Internal Protuberance of the *Os Humeri.*
20. 20. The *Pronator Radij teres.* That of the left side, being dissected from it's Insertion, and left at it's two Originals.
21. 21. The *Supinator Radij Longus.*
22. Part of the *Extensor Radialis.*
23. 23. The *Flexor Radialis*, that of the left Arm hanging at it's Insertion.
24. 24. The *Perforatus*; that of the left side hanging by its Tendons on the Palm of the Hand.
25. The *Perforans*; a little raised in the left Arm.
26. The Tendon of the *Flexor Ulnaris* as it runs to the *Carpus.*
27. A Tendinous Expansion, like the *Palmaris* in Man; but here was no Muscle, which is often seen in *Humane* Bodies.
28. 28. The *Abductor Pollicis.*

29. The *Flexor Secundi internodij Pollicis.*
30. *Abductor Indicis,*
31. 31. The *Lumbricales.*
32. The *Abductor minimi digiti.*
33. The *Pectoralis*; that of the left side being raised, to shew the decussation of it's Fibres, as in Man.
34. Part of the *Musculus subclavius.*
35. *Serratus minor anticus.*
36. 36. The *Intercostales externi.*
37. 37. The *Serratus major anticus*; where 'tis indented with the *Musculus obliquus descendens.*
38. 38. The *Obliquus descendens.*
39. The *Obliquus ascendens*, as it appeared after the *descendens* was removed.
40. 40. The *Musculi Recti*, with their *Paragraphs* or *Inscriptions*, as in Man
41. 41. The *Musculus communis Membranosi.*
42. 42. The *Sartorius.*
43. 43. The *Rectus Femoris.*
44. 44. The *Vastus internus.*
45. Part of the *Vastus externus.*
46. 46. Parts of the *Triceps.*
47. 47. The *Pectinæus.*
48. The *Gracilis.*
49. 49. The *Tibialis Anticus.*
50. Part of the *Gasterocnemius.*
51. Parts of the *Peronei.*
52. The *Extensor Pollicis longus.*
53. The *Extensor Pollicis brevis*, which differ'd in this *Animal*, from that in Man.
54. The Tendons of the *Extensor Communis digitorum*, as they pass between the *Interossij.*
55. The *Abductor minimi digiti.*
56. The *Pronator Radij Quadratus.*
57. Part of the *Supinator Radij brevis*; at it's Insertion to the *Radius.*

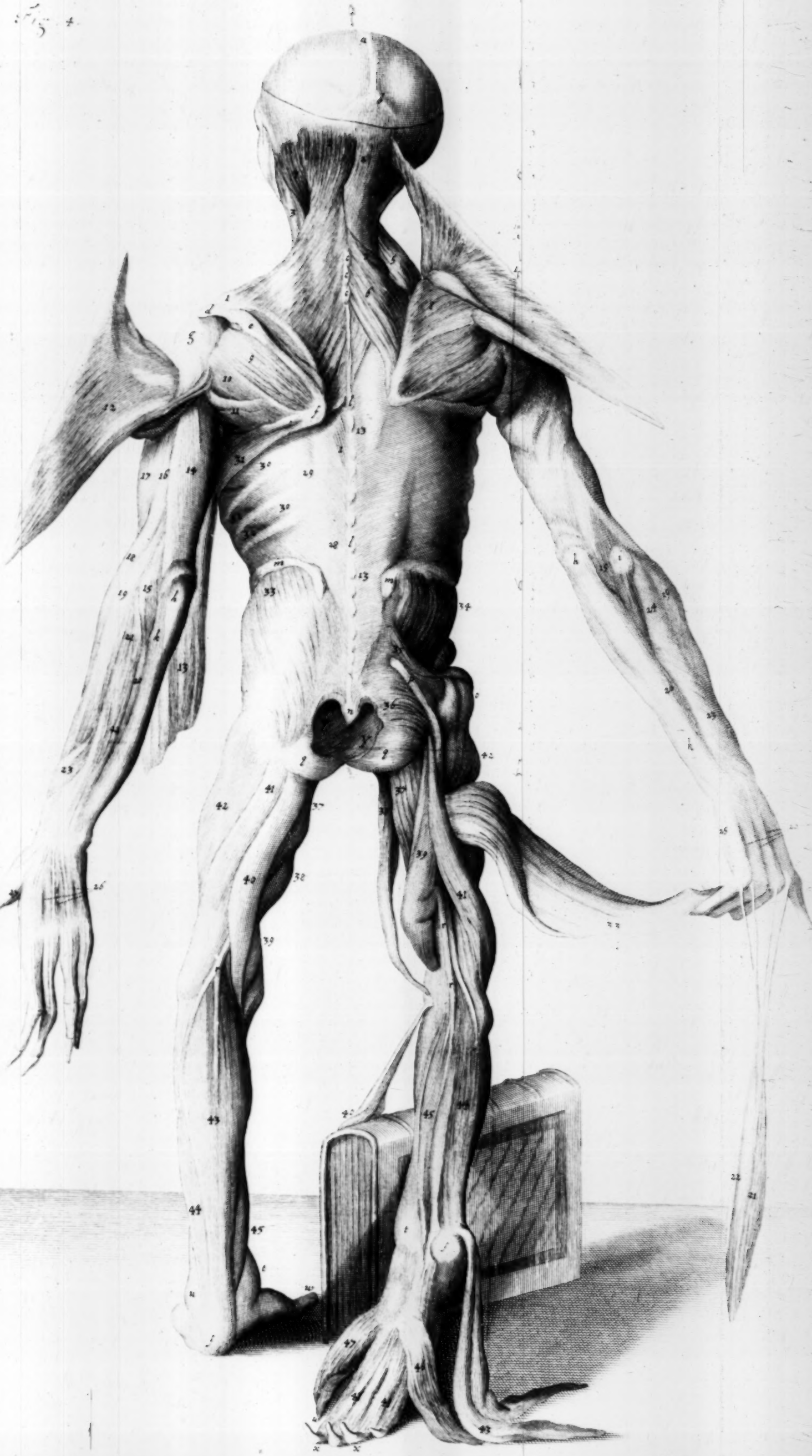
Figure the Fourth

Shews the *Muscles* of the *Back-part* of the *Body.*

a. THE *Sagittal Suture.*
b. The *Lambdoidal Suture.*
c. c. c. The *Spines* of the *Superior Vertebræ* of the *Thorax*, and of one of the *Inferior* of the *Neck.*

d. The

Fig. 4.



M. Vander Gucht Sculp.

a. THE *Sagittal Suture.*

b. The *Lambdoidal Suture.*

c. c .c. The *Spines* of the *Superior Vertebræ* of the *Thorax*, and of one of th e *Inferior* of the *Neck.*

d. The

d. The Extremity of the *Clavicle*, where it is connected to the *Spine* of the *Scapula.*

e. The *Spine* of the *Scapula.*

f. The lower Angle of the *Scapula.*

g. The upper part of the *Os Humeri*, made bare, by raiſing the *Deltoid Muſcle.*

h. h. The *Acromion* or *Elbow.*

i. The External Protuberance of the *Os Humeri*, where the upper part of the *Radius*, is Articulated.

k. The *Ulna.*

l. l. The *Spines* of the *Back* and *Loins.*

m. m. The *Spines* of the *Oſſa Ilium.*

n. The *Os Coccygis.*

o. The *Great Trochanter.*

p. The Trunk of the Great *Crural Nerve.*

q. q. The *Oſſa Iſchij.*

r. r. r. The *Crural Nerves* in the Hams.

ſ. ſ. The *Os Calcis.*

t. t. The *Malleolus Internus.*

u. The *Malleolus externus.*

w. w. The *Great Toe.*

x. x. The four *little Toes.*

y. y. The *Pelvis* left open, by taking out the *Anus* with the *Rectum.*

N° 1.1.1.1. The *Muſculus Cucularis*, raiſed on the right ſide, and left faſtened to the *Occiput*, and to its Inſertion at the *Spine* of the *Scapulæ* and *Clavicle.*

2. Part of the *Splenius.*

3. Part of the *Maſtoideus.*

4. Part of the *Complexus.*

5. Part of the *Levator Scapulæ.*

6. *Rhomboides.*

7. Part of the *Serratus ſuperior poſticus.*

8. *Supraſpinatus.*

9. *Infraſpinatus.*

X. The *Teres minor*, which is larger here than in *Man.*

11. The *Teres major.*

12. The *Deltoides* raiſed.

13. 13. 13. 13. The *Latiſſimus Dorſi*, on the right ſide *in ſitu*, in the left, freed from it's Original and hanging down.

14. The *Biceps Externus ſeu Gemellus.*

15. The *Anchonæus.*

16. Part of the *Brachæus internus.*

17. Part of the *Biceps internus.*

18. The *Supinator Radij longus.*

19. The *Extenſor Carpi Radialis.*

20. 20. The *Extenſor Carpi Ulnaris.*
21. 21. The *Extenſor Communis digitorum*, on the right ſide hanging by its Tendons.
22. 22. The *Extenſor minimi digiti*, on the right ſide hanging down.
23. The *Extenſores Pollicis.*
24. The *Supinator Radij brevis.*
25. The *Abductor minimi digiti.*
26. The *Muſculi interoſſei.*
27. The *Abductor Pollicis.*
28. The *Longiſſimus Dorſi.*
29. The *Sacrolumbalis.*
30. 30. The *Intercoſtales.*
31. Part of the *Serratus major anticus.*
32. The *Serratus inferior poſticus.*
33. The *Glutæus maximus* on the left ſide *in ſitu*, on the right freed from its Origin, and left at it's Inſertion.
34. The *Glutæus medius.*
35. The *Pyriformis.*
36. The *Marſupialis ſ. Obturator.*
37. 37. Part of the *Triceps.*
38. 38. The *Gracilis.*
39. The *Semimembranoſus.*
40. The *Seminervoſus.*
41. The *Biceps femoris.*
42. Part of the *Vaſtus externus.*
43. 43. The *Gaſterocnemius externus*, that of the right ſide hanging to its Inſertion, at the *Os Calcis.*
44. The *Gaſterocnemius Internus.*
45. Part of the *flexor Digitorum perforans.*
46. The fleſhy part of the *flexor Digitorum perforatus.*
47. The *flexor Oſſis Pollicis*, together with the *Abductor Pollicis*, raiſed from it's Origin, and hanging down.
48. The *Muſculi Lumbricales.*

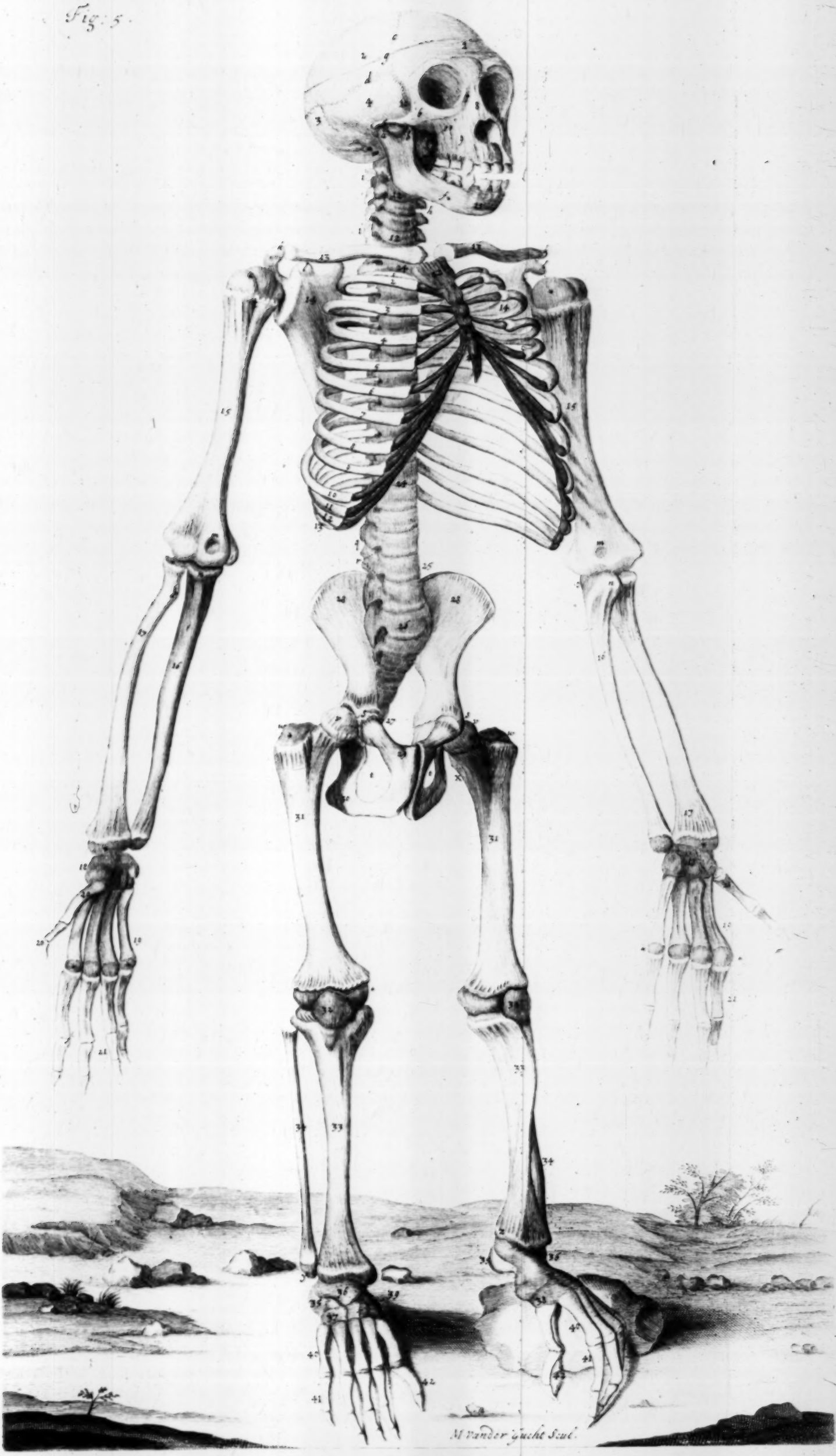
The fifth Figure

Repreſents the *Sceleton*, or the *Bones*.

1. THE *Os Frontis.*
2. The *Os Bregmatis.*
3. Part of the *Os Occipitis.*
4. *Os Temporale, ſeu Squammoſum.*
5. *Os Jugale, ſeu Zygomaticum.*
6. The firſt Bone of the *Upper Jaw.*
7. The *Os Lachrymale.*

8. The

Fig: 5.



M Vander Gucht Scul.

1. 2. The *Os Bregmatis.*
3. Part of the *Os Occipitis.*
4. *Os Temporale, ſeu Squammoſum.*
5. *Os Jugale, ſeu Zygomaticum.*
6. The firſt Bone of the *Upper Jaw.*
7. The *Os Lachrymale.*

8. The

8. The *Os Narium.*
9. The fourth Bone of the *Upper Jaw.*
10. The upper part of the *Os Sphænoides.*
11. The *lower Jaw.*
a. The *Proceſſus Condyloides* of the *lower Jaw.*
b. The *Proceſſus Corone.*
c. The *Coronal Suture.*
d. The *Sutura Oſſis Temporalis, ſeu Squammoſi.*
e. A *Foramen* for the paſſing the Nerves, and the Blood Veſſels in the *upper Jaw.*
f. A like *Foramen* in the *under Jaw.*
g. Where the *Skull* was ſawed, to take out the *Brain.*
h. The *Tranſverſe Proceſſes* of the *Vertebræ* of the *Neck.*
j. j. The *Oblique aſcending* and *deſcending Proceſſes* of the *Neck.*
12. 12. The *Vertebræ* of the *Neck.*
13. 13. The *Claviculæ*, or *Collar Bones.*
K. K. The Connection of the *Claviculæ*, to the *Spina Scapulæ.*
14. 14. The Internal parts of the *Scapula.*
l. l. The *Proceſſus Chorocoides Scapulæ.*
15. 15. The *Os Humeri.*
†. †. A *Sinus* for receiving the External Tendon of the head of the *Biceps.*
m. m. A *Sinus* for receiving the Prominence (*n.n.*) of the *Ulna* upon bending the *Arm.*
16. 16. The *Ulna.*
o. Part of the *Olecranon* of the *Ulna* of the left *Arm.*
17. 17. The *Radius.*
p. A Prominence of the *Radius*, to which the internal great Tendon of the *Muſculus Biceps* is inſerted.
18. 18. The Bones of the *Carpus*, which in a great meaſure were *Cartilaginous.*
19. 19. The Bones of the *Metacarpus.*
20. 20. The Bones of the *Thumb.*
21. 21. The Bones of the *Fingers.*
22. 22. The *Sternum* or *Os Pectoris.*
23. The *Cartilago Enſiformis.*
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. The Thirteen *Ribs* of each ſide.
24. The *Vertebræ* of the *Back.*
25. The *Vertebræ* of the *Loins.*
q. The *Tranſverſe Proceſſes* of the *Vertebræ* of the *Loins.*
r. The *Foramina* for the paſſage of the Nerves.
26. The *Os Sacrum.*
27. The *Os Coccygis.*
28. 28. The *Os Ilium.*
29. The *Os Pubis.*
30. The *Os Iſchij.*
s. s. The *Cartilaginous* Conjunction of the *Os Ilium* with the *Os Pubis* and *Iſchij* at the *Acetabulum.*
t. t. The

t. t. The large *Foramen* of the *Os Pubis* and *Iſchij.*
31. 31. The *Os femoris.*
v. v. The Head of the *Os femoris* in the *Acetabulum.*
w. w. The *Great Trochanter*, which was *Cartilaginous.*
X. The *leſſer Trochanter.*
32. 32. The *Patella*, which was *Cartilaginous.*
33. 33. The *Tibia.*
34. 34. The *Fibula.*
35. 35. The *Os Calcis.*
36. 36. The *Aſtragalus.*
37. The *Os Cubiforme.*
38. The *Os Naviculare, ſeu Cuneiforme majus.*
39. The *Oſſa Cuneiformia minora.*
40. 40. The *Oſſa Metatarſi.*
41. 41. The *Oſſa Digitorum.*
42. 42. The Bones of the *Great Toe.*
y. The *Malleolus externus.*
z. The *Malleolus internus.*
* * * * Signifie, that thoſe Parts were *Cartilaginous.*

The ſixth Figure

Repreſents the *Stomach, Inteſtines, Pancreas, Spleen, Liver*, &c.

A. A. THE back ſide of the *Stomach*, it being turned upwards.

B. Part of the *Oeſophagus* or *Gullet*, before it joyns with the upper or left *Orifice* of the *Stomach.*

C. The right *Orifice* of the *Stomach*, or *Pylorus.*

a. a. The Extremities of the *Vaſa Brevia*, which paſs between the *Spleen* and the *Stomach.*

b. b. &c. Divers *Lymphatick Glands* on the *Stomach.*

D. The *Superior Coronary Arteries* and *Veins*, and their Ramifications.

E. E. The *Inferior Coronary Blood Veſſels* of the *Stomach*, which ſends Branches alſo to the *Omentum.*

F. F. The *Omentum* or *Caul* turned up, to ſhew it's lower *Leaf.*

G. G. The *Liver*, like the *Humane*; and not divided into *Lobes*, as 'tis in *Apes.*

c. A ſmall Lobe of the *Liver* at the entrance of the *Vena Porta.*

d The *Fiſſure* or Cleft in the *Liver* at the entrance of the *Umbilical Vein.*

f. f. The *Gall Bladder.*

H. The beginning of the *Duodenum.*

I. I. The *Pancreas.*

g. g. The

Fig: 6.

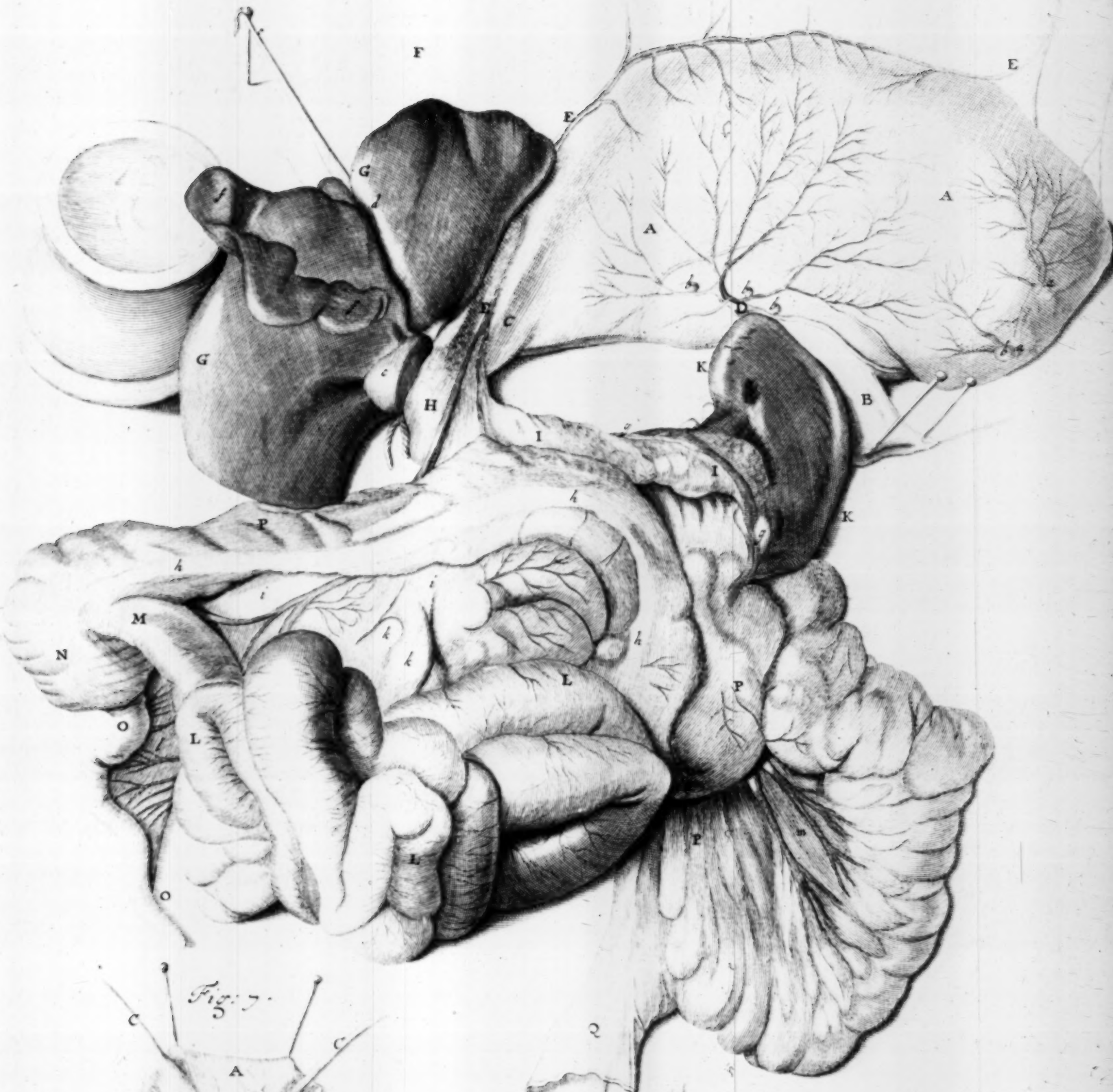


Fig: 7.

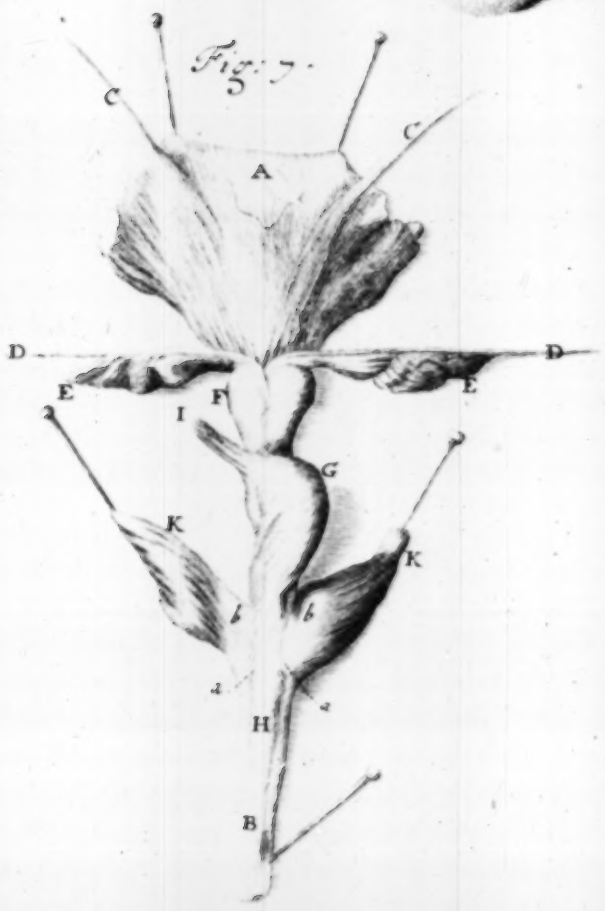
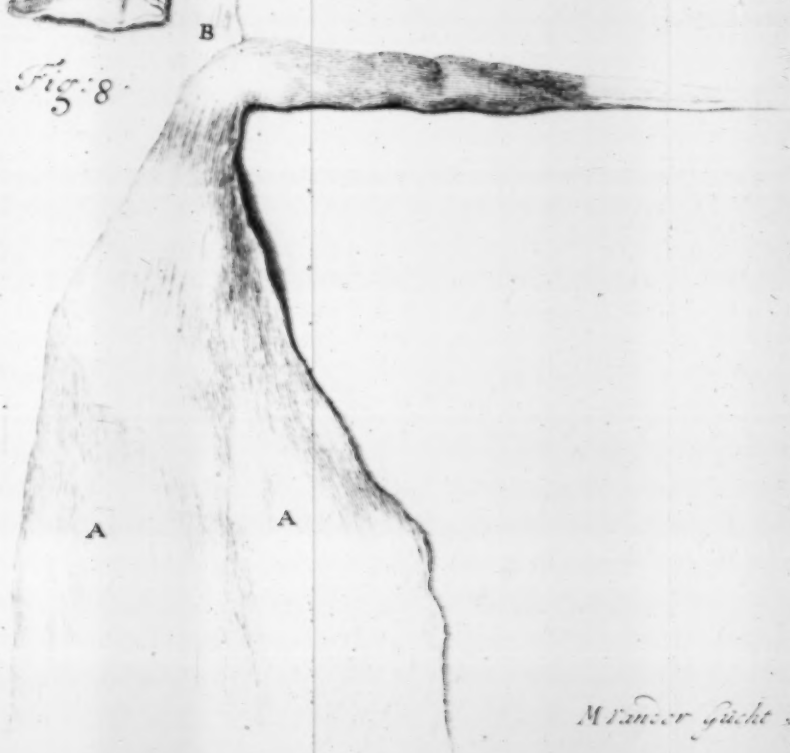


Fig: 8.



M Vancor Gücht Sculp.

I

—

R

A.

the

an

Bra

tis

c. A small Lobe of the *Liver* at the entrance of the *Vena Porta.*

d The *Fissure* or Cleft in the *Liver* at the entrance of the *Umbilical Vein.*

f. f. The *Gall Bladder.*

H. The beginning of the *Duodenum.*

I. I. The *Pancreas.*

g. g. The

g. g. The Blood Veſſels of the *Spleen*, eſpecially a Branch of the *Vena Porta*.

K. K. The *Spleen*.

L. L. L. The *Small Guts*.

M. The *Ileon* juſt before it enters the *Colon*.

N. The beginning of the *Colon*.

h. h. One of the Ligaments of the *Colon*.

O. O. The *Cæcum*, or *Appendicula Vermiformis*.

P. P. The *Colon* in its whole Progreſs, to the *Rectum*.

j. j. Part of the *Meſenterie*.

k. k. The Glands of the *Meſenterie*.

l. That part of the *Meſenterie*, which is connected to the *Cæcum*, or the *Meſocæcum*.

m. The *Meſocolon*, or that Part of the *Meſenterie* that is faſtened to the *Colon*.

2. The upper part of the *Inteſtinum Rectum*.

The ſeventh Figure

Shews the *Organs* of GENERATION.

A. THE back part of the *Bladder* of *Urine*, the greateſt part of the *Bladder* being cut off.

B. The *Penis*.

C. C. The two *Ureters*.

D. D. The *Vaſa Deferentia*.

E. E. The *Veſiculæ Seminales*.

F. The *Glandulæ Proſtatæ*, or *Corpus Glandoſum*.

G. The *Bulb* of the *Cavernous Body* of the *Urethra*, covered with the *Muſculus accelerator Urinæ ſeu Spermatis*.

a. a. The two Productions of the laſt mentioned *Muſcle*, which are inſerted to the two *Cavernous Bodies* of the *Penis*, on each ſide the *Urethra*, by which means that part of the *Urethra* is compreſt, and it's Contents forced out.

b. b. The beginning of the two *Cavernous Bodies* of the *Penis*.

H. The Cavernous Body of the *Urethra*.

j. One of the *Tranſverſe Muſcles* of the *Penis*, call'd the *Third Pair*.

K. K. The *Muſculi Directores Penis*.

The

The Eighth Figure

Exhibits part of the *Muſculus Latiſſimus Dorſi* diſſected.

A. A. THAT part of the *Muſcle* that lies on the *Back*, as in *Humane Bodies*.

B. It's *Tendon* which is inſerted to the *Os Humeri*, as in *Men*.

c. The Tendinous Extremity of a fleſhy Production of this *Muſcle*, which is implanted on the Internal Protuberance of the *Os Humeri* of this *Animal*; as 'tis alſo in *Apes* and *Monkeys*.

The ninth Figure

Repreſents the *Urinary Parts* and *Organs* of *Generation*.

A. THE left *Kidney* entire.

a. a. The *Membrana Adipoſa*, partly freed from the *Kidney*, and turned back.

B. The *Right Kidney* opened, to ſhew its *Glandulous* Subſtance, and *Urinary Tubes*, and the *Pelvis*.

b The *Tubuli Urinarij* which ariſe from the *Glandulous* Subſtance, and like Lines drawn from a *Circumference* to a *Center*, paſs to the *Fimbria* or Edge *c c*, in *Man* to the ſeveral *Papillæ*, where their Orifices open and empty themſelves into the *Pelvis*.

c. c. The ſaid *Fimbria*, of a Semicircular Figure, where the Extreams of the *Urinary Tubes* diſcharge the *Urine* into the *Pelvis*, or rather *Funnel* of the *Kidneys*.

d. The *Pelvis* or *Infundibulum*: For being large here in the *Kidney*, and running into a long ſlender Stem in the *Ureter*, it more properly repreſents a *Funnel*, and ſerves for the Conveying the *Urine* thence into the *Bladder*.

C. C. The *Glandulæ Renales*.

D. D. The Deſcending Trunk of the *Arteria Magna* or *Aorta*, below the *Diaphragm*.

d. The *Cæliac Arterie*.

ð. The *Arteria Meſenterica ſuperior*.

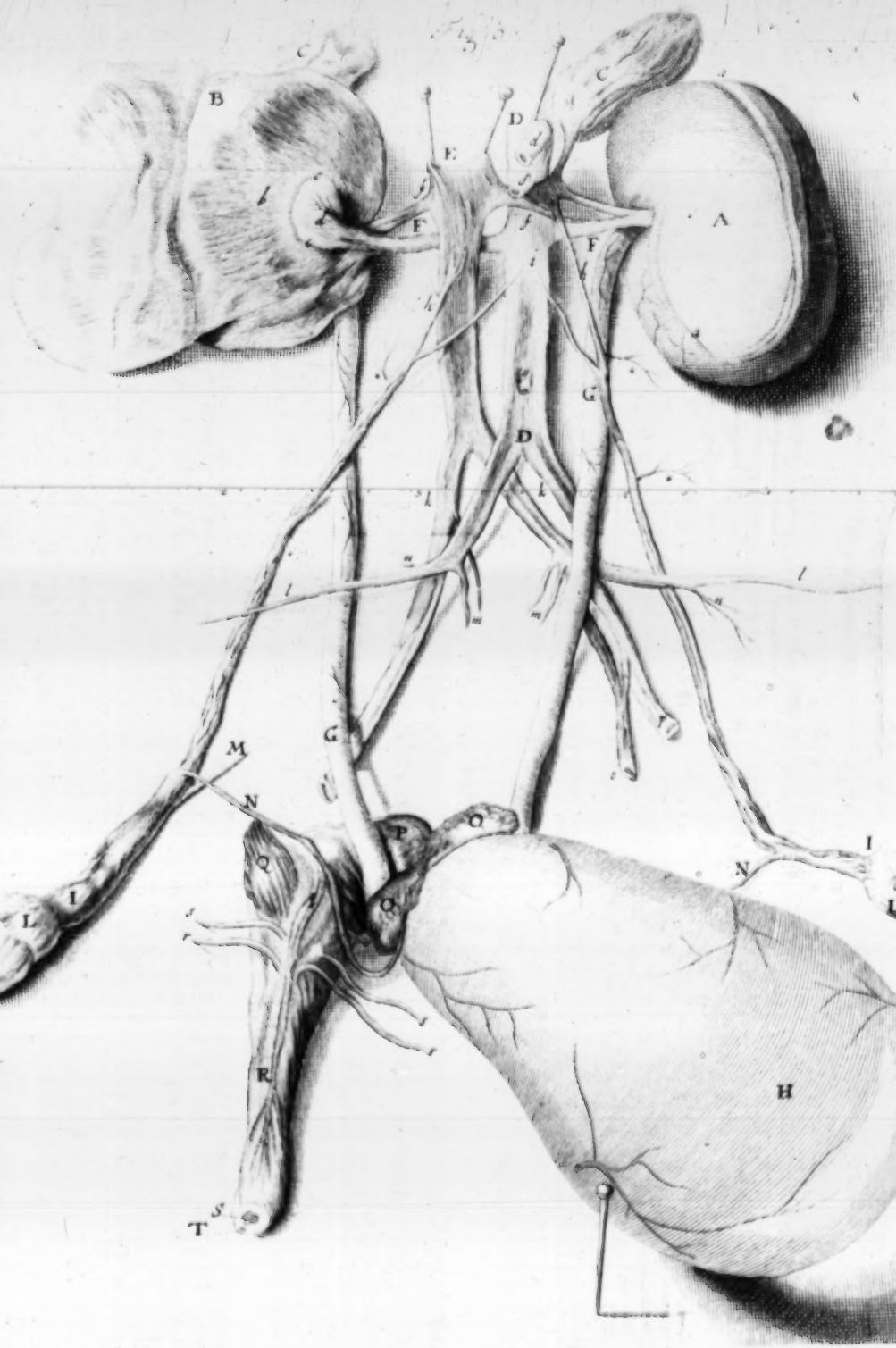
g The *Arteria Meſenterica inferior*.

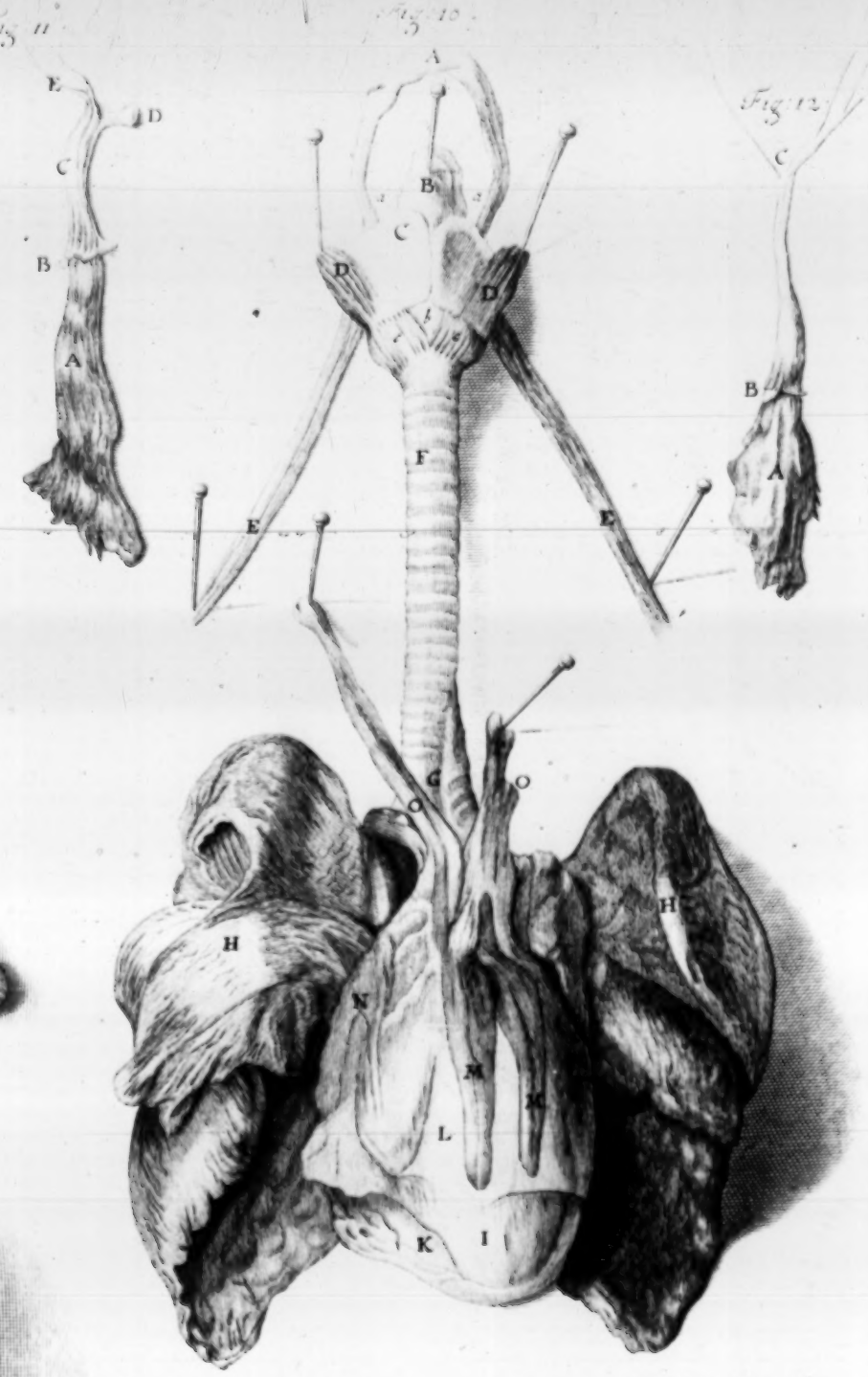
E. The Deſcending Trunk of the *Vena Cava*.

F. F. The *Emulgent Arteries*.

f. f. The *Emulgent Veins*.

G. G. The





M. Vandor Gucht Scul.

A.

wh
thi

A.

an

Th

lik
or
an

of
Fu

rur
ſen
Bl
(

the

a. The Cœliac Arterie.
d. The *Arteria Meſenterica ſuperior.*
g. The *Arteria Meſenterica inferior.*
E. The Deſcending Trunk of the *Vena Cava.*
F. F. The *Emulgent Arteries.*
f. f. The *Emulgent Veins.*

G. G. The

G. G. The *Ureters.*
H. The *Bladder* of *Urine.*
h. h. The *Spermatick Veins* which discharge themselves into the *Vena Cava*, and the left *Emulgent*, as in *Man.*
j. The *Spermatick Arteries*, as they arise from the fore-part of the Trunk of the *Aorta.*
J. J. The *Vasa Præparantia Pampini-formia, seu Corpora Pyramidalia.*
K. K. The *Testes* or *Stones*, which appear here flaccid, having been kept some time, before the *figure* was taken.
L. L. The *Epididymis*, making several Convolutions on the body of the *Testes.*
M. Part of the *Cremaster Muscle.*
N. N. The *Vasa Deferentia.*
O. O. The *Vesiculæ Seminales.*
P. The *Prostates* or *Corpus Glandosum.*
Q. The *Musculus Erector Penis* of the right side.
R. The upper part or *Dorsum Penis.*
S. The *Corpora Cavernosa Penis*, cut transverse.
T. The *Urethra.*
k. k. The main Trunk of the *Iliac Arterie* and *Vein.*
l. l. The *Umbilical Arteries.*
m. m. The *Arterie* that goes to the *Penis.*
n. n. The *Arterie* that goes to the *Bladder* of Urine.
o. The internal *Iliac Vein* and *Arterie.*
p. The external *Iliac Vein* and *Arterie.*
q. The *Vena Pudenda seu Penis.*
r. r. The *Nerves* of the *Penis.*
s. s. The *Arteries* of the *Penis.*

The tenth Figure

Demonstrates the Parts of the *Thorax* with the *Arteria Aspera* and *Larynx.*

A. THE fore-part of the *Os Hyoides.*
a. a. Its two ends, that are connected to the two *Superior* long *Processes* of the *Cartilago Scutiformis.*
B. The *Epiglottis.*
C. The *Cartilago Scutiformis.*
b. The Prominent part of the *Annulary Cartilage.*
D. D. The *Musculi Hyothyroidei.*
E. E. The *Musculi Sternothyroidei.*
c. c. The *Musculi Cricothyroidei.*
F. The *Arteria Aspera*, or *Wind-pipe.*
G. It's division, where it passes to the right and left *Lobes* of the *Lungs.*
H. H. The *Lungs.*

J. The *Cone* of the *Heart.*

K. The right *Ventricle* of the *Heart* here opened, so that part of the *Polypus* contained there, came in view.

L. Part of the *Pericardium*, on the *Basis* or upper part of the *Heart.*

M. M. The *Thymus*, lying on the *Pericardium.*

N. The *Mediastinum* freed from the *Sternum*, and turn'd to the right side.

O. O. The two *Subclavian Arteries.*

P. The *Carotid Arteries.*

The eleventh Figure

Shews the *Polypus* or Coagulated Blood found in the *left Ventricle* of the *Heart.*

A. THAT part contained in the *Ventricle.*

B. Three Impressions, formed by the *Semilunary Valves.*

C. That part, that lay in the *Aorta.*

D. That part that passed into the descending Trunk of the *Aorta.*

E. Those *Ramuli* of it that lay in the ascendent Branches of the *Aorta.*

The twelfth Figure

The *Polypus* found in the right *Ventricle* of the *Heart.*

A. THAT part contained in the *Ventricle.*

B. The Impressions made by the *Valvulæ sigmoides.*

C. The Branches leading to the right and left *Lobes* of the *Lungs.*

The thirteenth Figure

Represents the *Basis* of the *Brain* with the *Medulla Oblongata*, and the *Nerves* and *Arteries* cut off.

A. A. THE two *anterior* or fore *Lobes* of the *Brain.*

B. B. The two *posterior* or hinder *Lobes* of the *Brain.*

a. a. Two depressions in the fore *Lobes* caused by the rising of the *Frontal* bone, that composes the upper part of the *Orbit* of the *Eye*; which in this *Animal*, and in *Monkeys*, is more eminent than in *Man.*

b. b. The division of the right and left *Hemisphere* of the *Brain*, where the *Falx* is placed. This fore-part of the *Brain* in this *Animal* appeared somewhat flatter than in *Man.*

C. C. The *Cerebellum.*

D. The *Principium Medullæ Spinalis*, or that part of the *Cauda Medullaris*,

Fig. 13.

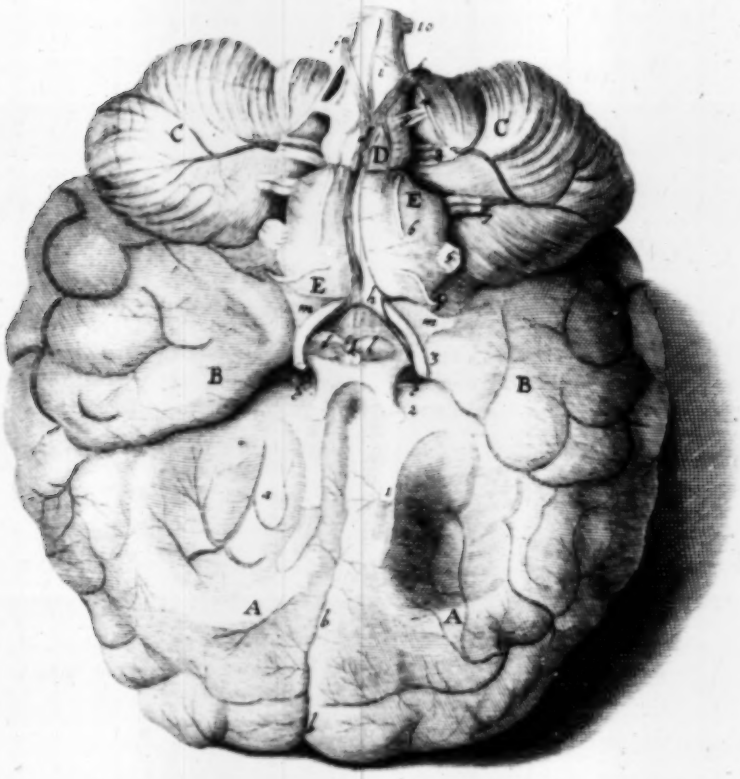


Fig. 14.

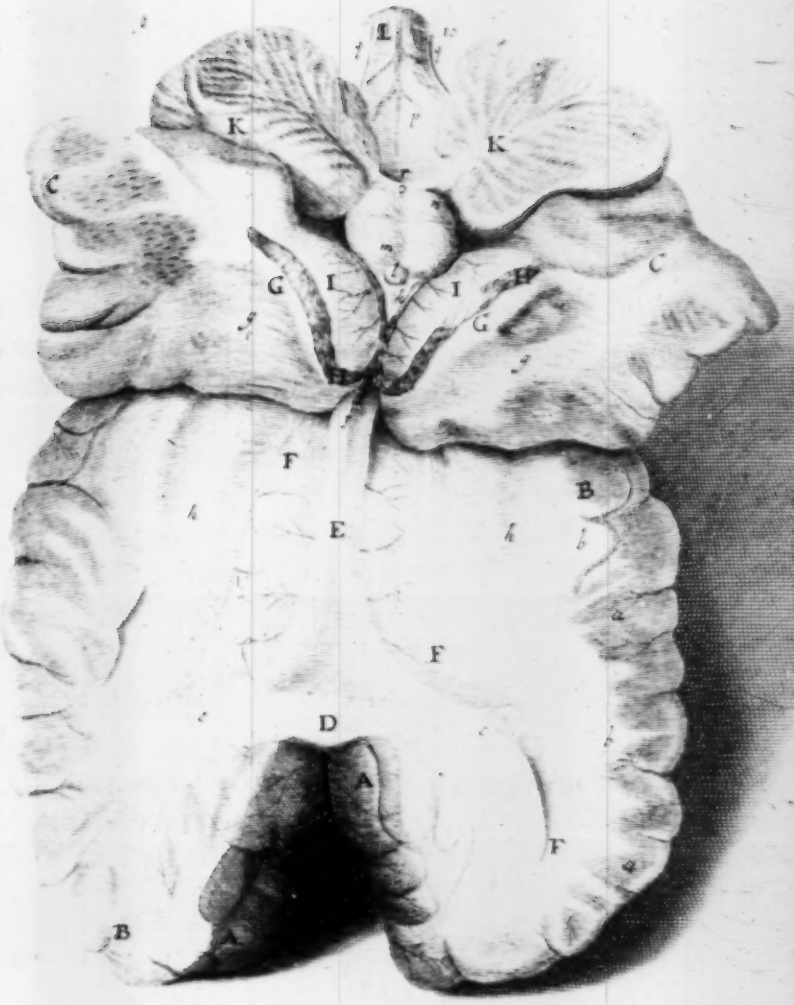


Fig. 16

Fig. 17

Fig. 15

M. Vander Gucht Sculp.

b. b. The diviſion of the right and left *Hemiſphere* of the *Brain*, where the *Falx* is placed. This fore-part of the *Brain* in this *Animal* appeared ſomewhat flatter than in *Man*.

C. C. The *Cerebellum*.

D. The *Principium Medullæ Spinalis*, or that part of the *Cauſex Medullaris*,

dullaris, where the *Corpora Pyramidalia* and *Olivaria* are placed, as in an *Humane Brain*.

E. E. The *Protuberantia Annularis*, or *Pons Verolij*.

e. e. The *Carotid Arteries*.

f. f. The *Vertebral Arteries*.

g. The *Cervical Arterie*.

h. The *Communicant* Branches between the *Cervical* and *Carotid Arteries*.

j. A ſmall *Arterie* deſcending down the *Spinal Marrow*.

k. The *Infundibulum*.

l. l. The *Glandulæ duæ albæ pone Infundibulum*, , or rather two *Medullary Protuberances* there.

m. m. Parts of the *Crura Medullæ Oblongatæ* before they unite under the *Pons Verolij*, or *Annular Protuberance*.

1. The *Olfactory*, or firſt pair of Nerves.
2. The *Optick*, or ſecond pair of Nerves.
3. The *Nervi Oculorum motorij*, or third pair of Nerves.
4. The *Pathetick*, or fourth pair of Nerves.
5. The fifth pair of Nerves.
6. The ſixth pair of Nerves.
7. The *Auditory*, or ſeventh pair of Nerves.
8. The *Par Vagum*, or eighth pair of Nerves.
9. The ninth pair of Nerves.
10. The tenth pair of Nerves, which may be reckoned rather the firſt pair of the *Neck*.

* * The *Nervus acceſſorius*, that goes to the eighth pair, or *Par Vagum*.

The fourteenth Figure.

Repreſents the inward Parts of the *Brain*, as divided by an *Horizontal Section*; where the *Baſis* of the *Brain* is reflected upwards.

A. A. PArts of the hinder *Lobes* of the *Brain*.

B. B. The upper part of the *Brain* next it's *Hemiſpheres*, divided from the lower.

C. C. The lower part next the *Baſis*, reflected or turned up.

a. a. The *Cortical* or *Cinericious* part of the *Brain*, which is *Glandulous*.

b. b. The *Medullary* part, that runs up between the *Cortical*, and is *Nervous*.

D. The *Corpus Tranſverſale*.

E. The *Fornix*.

e. e. The *Crura Fornicis*.

f. The two *Roots* of the *Fornix*.

F. F. The two firſt *Ventricles* of the *Brain.*

G. G. Parts of the *Corpora Striata*, entire.

g. g. The *Striæ* as they appear in this Section in the *Corpora Striata* in the lower part of the *Brain.*

h. h. The ſame *Striæ*, in the upper part of the *Brain.*

H. H. The *Plexus Choroides.*

J. J. The *Thalami Nervorum Opticorum.*

j. The *Plexus Choroides* continued.

K. K. The *Cerebellum* divided perpendicularly, to ſhew the ramifications of the *Medullary* part in the *Cortical.*

k. The *Foramen anterius* that leads to the Cavity under the *Protuberantiæ orbiculares.*

l. The *Glandula Pinealis.*

m. The *Nates.*

n. The *Teſtes.*

o. The *Commiſſure* of the *Medullary Proceſſes* of the *Cerebellum* and *Teſtes.*

p. The fourth *Ventricle* opened.

q. q. The *Acceſſory Nerves.*

10. The tenth pair of Nerves.

r. The *Foramen poſterius* or *inferius*, that leads to the Cavity under the *Protuberantiæ orbiculares.*

s. The *Rima* or *Foramen*, that leads to the *Infundibulum.*

The fifteenth Figure

Is a Copy of the *Figure* that *Nicholaus Tulpius* gives of the *Orang-Outang* that was brought to *Holland* from *Angola.*

The ſixteenth Figure

Repreſents the *Figure* that *Jacob. Bontius* gives of the *Orang-Outang* in *Piſo.*

The ſeventeenth Figure.

Is taken out of *Geſner*, which he tells us, he met with in a *German* Book, wrote about the *Holy Land.*

FINIS.